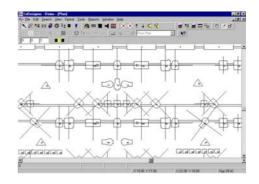
LxDesigner

User's Manual

Rev 1.08

By LxDesigns.

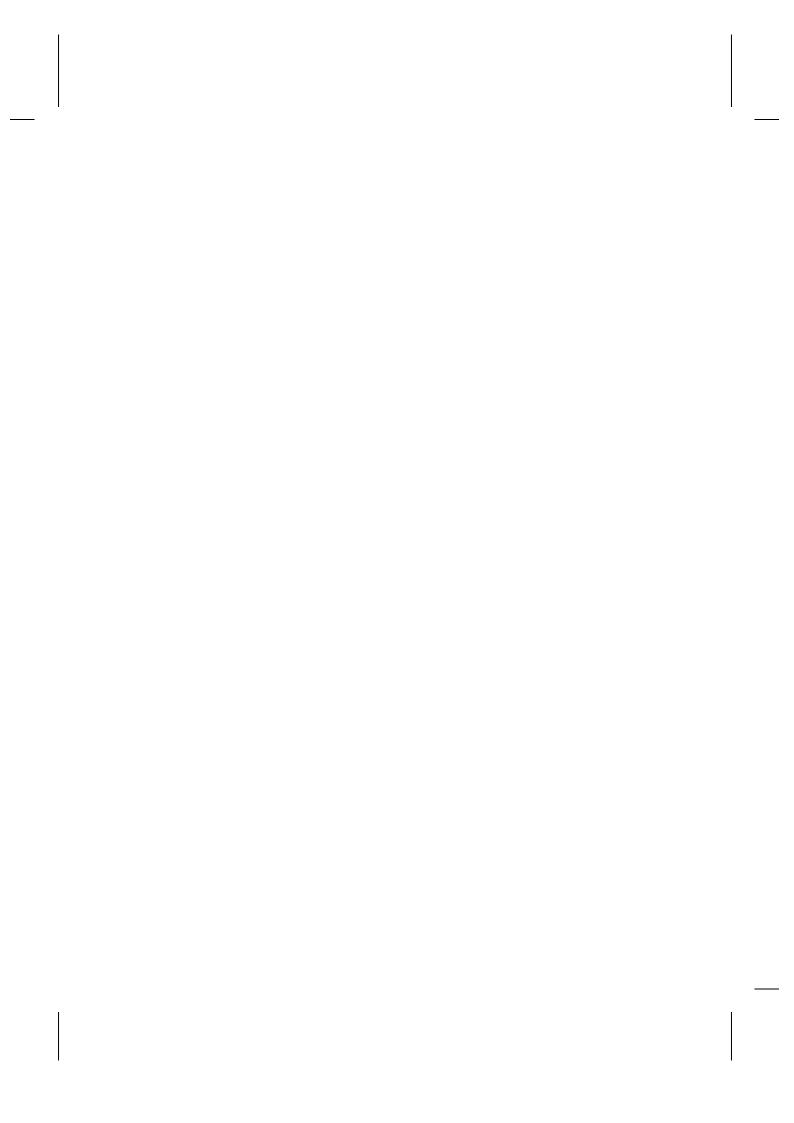


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Overview and Installation

This chapter provides an overview of the software suite and instructions on how to install the program on your machine.

Topics covered in this chapter are:

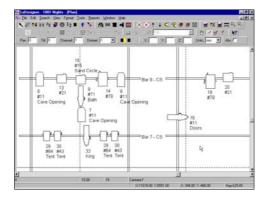
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Software Suite Overview	1.2
System Requirements	1.6
Installing LxDesigner	1.6
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Software Suite Overview

The software consists of a number of applications which together form the LxDesigner software suite.

LxDesigner Standard

LxDesigner Standard is a P.C. based 2D lighting design software application. The program is designed to run on a Windows® 95, 98, 2000, NT, ME or XP based P.C. and provides an easy to use design environment for stage lighting. Included are a number of libraries containing symbols for the various set, rigging and fixtures used in the design process. The plan is built up by simply dragging and dropping the required symbols on to the drawing area or by using one of the built-in tools such as the truss builder. The package has a number of built-in reports which can be used to generate the paperwork associated with the design such as gel, rigging and equipment calls. The plan and associated reports can be printed directly to a standard printer or transferred to other drawing packages, Word or Excel. There are a number of add-ons available to further extend the basic package enabling side, front and perspective views to be displayed. LxDesigner is now available in a number of different versions.

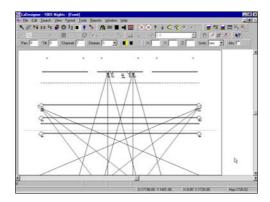


LxDesigner Lite

LxDesigner *Lite* is a cut down version of the standard LxDesigner version outlined in above. It provides a reduced number of editing features and reports than the standard package. LxDesigner *Lite* is an ideal package for capturing lighting rigs for producing high quality plans and supporting documentation at a fraction of the cost of a full feature package. It is possible to upgrade from the lite to the standard package at a later date.

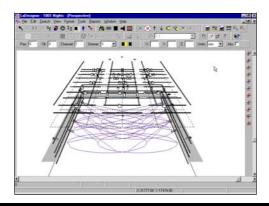
LxElevations

LxElevations is an add-on for LxDesigner, standard or *lite*, which allows side and front elevations of the plan to be viewed and edited. It is not a 3D package as it simply renders the bars, trusses and fixtures as 2D symbols, which are viewed from either the front or side. However if 3D symbols have been designed then these can be used in place of the 2D ones. This is a useful addition for displaying beam angles and towers as these can be viewed in a cross sectional nature. This add-on is part of LxDesigner and is enabled by the appropriate authorisation code.



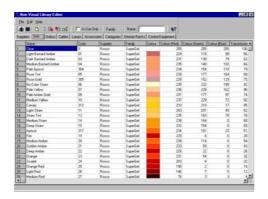
LxPerspective

LxPerspective is an add-on for LxDesigner, standard or *lite*, which allows the plan to be viewed in 3D. This is useful for viewing beam angles on a completed design. It is not a true 3D package as there is no rendering. All 3D primitives, set, bars/truss and fixtures can be displayed along with fixtures' beams. It is possible, by use of the camera controls to walk round, over and into the plan to view it from any angle or direction. The view is displayed in a separate window at the click of a button. This add-on is part of LxDesigner and is enabled by the appropriate authorisation code.



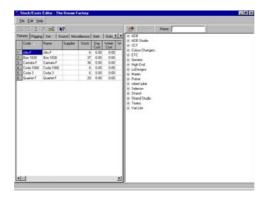
Library Editor

The library editor provides an easy to use spread sheet type interface to LxDesigner's non visual libraries. These include the gel, gobo, lamp and cable libraries. It enables the information to be edited and new items entered. This can be done either in the editor or the information can be exported to Excel, edited and then imported back into LxDesigner. The library editor is supplied with both the standard and *lite* versions of LxDesigner.



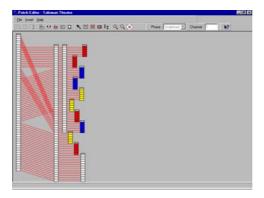
Stock/Costs Editor

The stock and costs editor provides an easy to use spread sheet type interface for creating and editing stock and cost files for use by LxDesigner. These files are used by the equipment reports to highlight shortages and the cost of hiring or purchasing the required equipment. The data is saved in CSV format which can be edited by Excel if preferred. A stock file simply lists all of the equipment available at a venue. A cost file specifies the hire or purchase cost for each piece of equipment added to the spread sheet. Multiple cost files can be produced for different suppliers. The one used is then specified in LxDesigner. The stock/costs editor is supplied with both the standard and *lite* versions of LxDesigner.



Graphical Patch Editor

The graphical patch editor provides an easy to use graphical interface to specifing the patch between desk, control and dimmer numbers. It allows each piece of control equipment to be added to the drawing sheet by selecting then from the available list. Each item is displayed as a list of channel blocks. These channel blocks can then be interconnected to define the patch. The editor also allows the allocation of dimmer channels to their correct phase either individually or as a block depending on the racks configuration. The graphical patch editor is only supplied with the standard version of LxDesigner.



System Requirements

To run LxDesigner on your computer the following hardware and software is required.

- Windows ® 95, 98, 2000, NT, ME or XP.
- 32Mbytes RAM minimum.
- 20Mbytes free hard disk space.
- CD-ROM drive.
- VGA video display (Settings : 16bit colour minimum, 800 * 600 minimum resolution)
- Mouse or equivalent pointing device.

Installing LxDesigner

To install the application on your computer follow the procedure given below.

- 1. Insert the CD into your CD-ROM disk drive.
- 2. The installation program will now run automatically.
- 3. You will now be guided through the installation by the set up application
- 4. To run LxDesigner select the program icon from your chosen program group.

Windows is a registered trademark of Microsoft Corporation.

Authorization

This application is protected by an authorization code system. To enable the complete application you must obtain an authorization code from us and enter this into the Registration window. This window is accessible from the Help menu option. To run the demonstration copy click on **Cancel** when the window is displayed.

If you have to reformat your hard disk and reload LxDesigner then you may require a new authorization code. This is due to the unlock number being generated from the hard disk serial number.

A hardware dongle is now available to enable the application to be installed on a number of machines but only enabled if the dongle is present. Contact our office for further details.

Technical Support

Technical support for LxDesigner can be obtained in the following ways.

Web Site: www.lxdesigns.co.uk

Email: support@lxdesigns.co.uk

Telephone/Fax: +44 (0) 1926 864181

Mail: LxDesigns

2, St Nicholas Avenue,

Kenilworth Warwickshire Great Britain CV8 1JU

Please note that free technical support is included with the purchase price of LxDesigner for one year. After this period a valid support contact must be purchased, contact our office for further details.

Getting Started

This chapter provides an overview of how to create a simple design using the application. It gives a brief description of each of the toolbars and their buttons, along with the plan and report menus.

Topics covered in this chapter are:

Topic	Page
Creating Your First Design	2.2
The Desktop	2.7
The Toolbars	2.8
The Plan Menus	2.14
The Report Menus	2.19

Creating Your First Design

A design in LxDesigner is created by following a simply process which is made up of 7 basic stages. These are:

- Stage 1. Creating a Blank Design
- Stage 2. Adding the Venue Outline
- Stage 3. Adding the Set
- Stage 4. Adding the Bars and Trussing
- Stage 5. Adding the Fixtures
- Stage 6. Generating the Reports
- Stage 7. Printing the Plan

Stage 1. Creating a Blank Design

The first stage in creating a new design is to set up a blank plan and specify the maximum dimensions and grid to be used. The following steps perform this:

- 1. Click **New** on the **File** menu.
- 2. Enter the name of your new design in text box.
- 3. Click New.
- 4. Select **Normal**, from the list of Templates.
- 5. Click on **OK**.
- 6. Click **No** on the next requester.
- 7. The **Floor Area** setup screen is now displayed this allows you to set the maximum size of your working area. This is used for printing, zooming to full and adjusting fixture heights.
- 8. Click **Grid** this allows you to set up the 'working grid', which is the grid that all objects will snap to when added to the design, and the 'screen grid' which is the grid displayed on the screen.
- 9. Click OK.

Stage 2. Adding the Venue Outline

The next stage is to draw the venue outline. The following steps perform this:

- 1. Click Add on the General toolbar.
- 2. Select the required primitives and add to the plan as described in the Primitives chapter.

Stage 3. Adding the Set

The next stage is to add the set. The following steps perform this:

1. Either:

Click Symbol Libraries, Set from the View menu.

or

Click Set on the Libraries toolbar.

- 2. Click on the required scenic entity and while holding the mouse button down drag it onto the plan and drop it by releasing the mouse button.
- 3. Click Select on the General toolbar.
- 4. Click on the scenic entity this will display a selection box around the entity along with a yellow and red dot.
- 5. To move the bar click on the yellow.
- Move the scenic entity to its required position and click again.
 Note: Do not hold the mouse button down while moving the entity.
- 7. If you wish to rotate the entity repeat step 6 but click on the red dot instead.
- 8. To change the scenic entity's parameters i.e. colour, scene and layer, right-click inside the selection box
- 9. Click **Properties** from the pop-up menu. This will display a screen, which allows the parameters to be changed.
- 10. Repeat steps 2 to 8 for all of the scenic entities within the design.

Stage 4. Adding the Bars and Trussing

The next stage is to add any bars or trussing. The following steps perform this:

- 1. Either:
 - Click Symbol Libraries, Rigging from the View menu.

Οľ

- Click Rigging on the Libraries toolbar.
- 2. Click on the required bar and while holding the mouse button down drag it onto the plan and drop it by releasing the mouse button.
- 3. Click Select on the General toolbar.
- 4. Click on the bar this will display a selection box around the bar along with a yellow and red dot.
- 5. To move the bar click on the yellow.
- 6. Move the bar to its required position and click again. Note: Do not hold the mouse button down while moving the bar.
- 7. If you wish to rotate the bar repeat step 6 but click on the red dot instead.
- 8. To change the bar's parameters i.e. name and height, right-click inside the selection box
- 9. Click **Properties** from the pop-up menu. This will display a screen, which allows the parameters to be changed.
- 10. Repeat steps 2 to 8 for all of the bars within the rig.

Stage 5. Adding the Fixtures

The next stage is to add the fixtures. The following steps perform this:

1. Either:

Click **Symbol Libraries, Fixtures** from the **View** menu.

or

Click Fixtures on the Libraries toolbar.

- 2. Click on the required fixture and while holding the mouse button down drag it onto the plan and drop it by releasing the mouse button.
- 3. Click Select on the General toolbar.
- 4. Click on the fixture this will display a selection box around the fixture along with a yellow and red dot.
- 5. To move the fixture click on the yellow dot.
- 6. Move the cursor to the position you what the bar and click again. Note: Do not hold the mouse button down while moving the fixture.
- 7. If you wish to rotate the fixture repeat step 6 but click on the red dot instead.
- 8. Repeat steps 2 to 6 for all of the fixtures within the rig.
- 9. Right-click inside the selection box
- 10. Click **Adjust Beam**, **Controls** from the pop-up menu. This can be used to adjust the fixtures beam angles. It will display a window which allows 'Pan', 'Tilt', 'Beam angle' and 'Height' to be modified. The 'Height' control is only displayed when a fixture is not on a bar.

Stage 6. Generating the Reports

The next stage is to generate the reports. The following steps perform this:

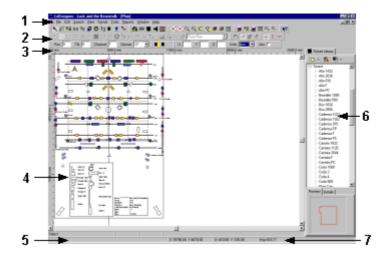
- 1. Click **System** from the **Reports** menu.
- 2. Click the required report. This will generate the report and open it in a new window.
- 3. To print the report click **Print** from the **File** menu.
- 4. Select the required printer and it's parameters.
- 5. Click **OK** to print the report or **Cancel** to abandon the printout.

Stage 7. Printing the Plan

The next stage is to print the plan. The following steps perform this:

- 1. Click **Print Plan** on the **File** menu.
- 2. Select the required printer and print parameters.
- 3. Click **OK** to print the report or **Cancel** to abandon the printout.

The Desktop



The following is a brief description of the version areas of the desktop.

1 - Menu Bar

Used to access LxDesigners commands.

2 - Toolbars

Toolbars provide a quick access to the major commands and libraries of LxDesigner

3 - Rulers

The rulers provide a quick indication of the current position and size of entities. The tick marks are based on the millimetres. The current position is indicated by the cross hair which moves along with the mouse cursor.

4 - Design Area

All drawing is performed in this area of the desktop.

5 - Status Bar

This area brief message describing the current toolbar button.

6 - Docking Area

This area is where palettes, libraries and short form reports will be docked.

7 - Coordinate Readout

These fields give a constant readout of the current cursor position and relative position if a entity is in the process of being drawn. The current snap mode will affect the readouts.

The Toolbars

There are a nuber of toolbars in LxDesigner which allow you to quick and easy access the major commands and functions of the application.

General Toolbar

This toolbar contains a group of buttons that control the application input mode. The application can be in one of eleven input modes, which is selected by one of the buttons on the toolbar.



Command	Function
Select	Enters 'Select' mode.
Add	Enters 'Add' mode.
Set Builder	Enters 'Set Builder' mode.
X• Truss Builder	Enters 'Truss Builder' mode.
Add Gel	Enters 'Add Gel' mode.
Add Gobo	Enters 'Add Gobo' mode.
12 Assign Channel	Enters 'Assign Channel' mode.
Beam On/Off	Enters 'Beam On/Off' mode.
Flug up	Enters 'Plug Up' mode.
Focus Fixture	Enters 'Focus Fixture' mode.

Primitive Toolbar

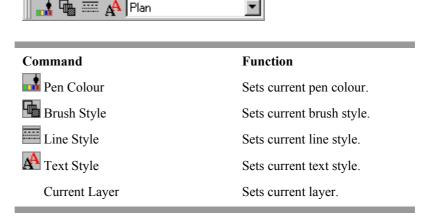
This toolbar is only enabled when the application is within the **Add** mode. It contains a group of buttons, which allows the primitive to be drawn to be specified. Each of the buttons represents either a single primitive or a group of primitives. Refer to the section Adding Primitives to the Plan in the 'Primitives' section for further details on each primitive and how to add them to the plan.



Command	Function
+ ■ ◆ ▲ ● Point	Draw points in various shapes.
\\\U_Line	Draw lines or polylines.
□ □ □ ⊿ △ Polygon	Draw rectangles or polygons.
OO Ellipse	Draw circles or ellipses.
A A Text	Draw single, multi line text.
COU Arc	Draw arcs.
Image	Insert images.
□ • • • • • • • • • • • • • • • • • • •	Draw 3D objects.
Group	Insert groups.
Outlet	Insert outlets.
Cable Run	Draw cable runs.
Pairing Lines	Draw pairing lines.
Dimensions	Draw dimensions.
ыш 🟗 🖫 ~ ≡ Special	Insert special symbols.
Focus Point	Insert focus points.

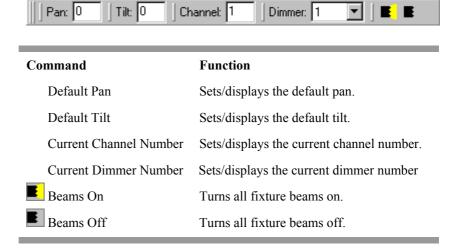
Drawing Toolbar

This toolbar is only enabled when the application is within the **Add** mode. It contains a group of controls which allow the primitive colour, fill pattern, line style, text style and layer to be specified. Refer to the section 'Specifing the Default Drawing Parameters' in the 'Primitives' section for further details on how each command works.



Fixture Toolbar

This toolbar contains a group of controls, which are used for controlling beam angle display, current channel number, and default pan and tilt controls.



Libraries Toolbar

This toolbar contains a group of buttons, which provide a short cut to displaying the various libraries. If Dock Libraries is enabled on the Drawing Setup dialog then the library will be docked on the right hand side of the screen when opened.



Command	Function
⚠ Set	Displays the set library.
Rigging	Displays the rigging library.
F ixture	Displays the fixture library.
Sound	Displays the sound library.
Venue	Displays the venue library.

Layers Toolbar

This toolbar contains a group of controls which provide the ability to turn layers, scenes and bars on and off.. Refer to the sections 'Controlling Views' or 'Trussing & Bars' for further details of how each command works.



Command	Function
I Visible Layers	Allows layers to be turned on/off.
Visible Scenes	Allows scenes to be turned on/off.
Protected Layers	Protects objects on layers.
Visible Bars	Allows bars to be turned on/off.
Selections List	Displays the selection list.
Selections Visible	Turns selection on/off.

Zooming Toolbar

This toolbar contains a group of controls which provide the ability to zoom in and out of the design. Refer to the section 'Controlling Views' for further details of how each command works.



Command	Function
Zoom Window	Zooms a defined window to fit the editing window.
Zoom Full	Views the full drawing.
Zoom In	Zooms in.
Zoom Out	Zooms out.
Views	Displays the views list.
Previous View	Returns to the previous view.
Front Elevation	Displays a front elevation.
Side Elevation	Displays a side elevation.
Perspective View	Displays a perspective view.

Snap Toolbar

This toolbar contains a group of controls allowing the snapping and lock modes to be specified. Refer to the sections 'Setting the Snap Mode' and 'Setting the Lock Mode' in the 'Primitives' section for further details on how each command works.



Command	Function
🖰 No Snap	Free draw – no snapping.
Snap to Grid	Snap to nearest grid point.
Snap to Point	Snap to nearest point on object.
Snap to Right Angle	Snap to nearest right angle.
No Lock	Free draw – no lock.
Horizontal Lock	Vertical movement only.
Vertical Lock	Horizontal movement only.

Coordinate Toolbar

This toolbar contains a group of controls which allow a coordinate to be entered via the keyboard. This is usful to define relative or absolute points for entering primitives. This toolbar has been superseded by the coordinate input palette and is only available in the standard version.



Control	Function
X	Sets the X value of the coordinate.
Y	Sets the Y value of the coordinate.
Z	Sets the Z value of the coordinate.
Units	Sets the base units for the X, Y and Z values.
Abs	If check coordinates are absolute otherwise they are offsets from the last point.

The Plan Menus

The plan window menus provide access to functions such as design management, printing, drawing setup and various editing tools.

File Menu

This menu contains all of the file and print related commands.

Command	Function
New	Allows a new design to be created.
Open	Allows an existing design to be opened.
Reopen	Displays a list of the last 10 designs edited.
Save	Saves change made to the current design.
Save As	Saves the current design under a new name.
Close	Closes the current design.
Delete Design	Deletes a design.
Save As Template	Saves the current design as a Templete.
Import Drawing	Imports a DXF drawing file.
Export	Exports the design in various formats.
Display/Window Layouts	Provides a means of saving/recalling display or window layouts.
Print Plan	Prints the current plan.
Automatic Backups	Enables/Disables automatic backups.
Backup	Backs up a design.
Restore	Restores a previous backed up design

Edit Menu

This menu contains all of the editing related commands.

Command	Function
Undo	Undos the last action.
Redo	Redos the last action
Copy	Copies the currently selected entity.
Paste	Pastes a copy of the currently selected entity.
Paste Properties	Pastes the properties of one entity to another.
Delete	Deletes the curently selected entity.

Search Menu

This menu allows you to finding and replacing various items within the design.

Command	Function
Find Gel	Highlights fixtures containing a particular gel.
Replace Gel	Replaces a gel used in the current design.
Find Gobo	Highlights fixtures containing a particular gobo.
Replace Gobo	Replaces a gobo used in the current design.
Find Fixtures	Highlights a particular fixture type.
Replace Fixtures	Replaces a fiture used in the current design.
Locate Clear	Clears any highlighting applied due to a Find command.

View Menu

This menu contains all of the library and palette viewing commands.

Command	Function
Symbol Libraries	Displays a particular symbol library.
Palettes	Displays a particular design palette.
Gels Library	Displays the gel library.
Gobos Library	Displays the gobo library.
Cable Library	Displays the cable library.
Lamp Library	Displays the lamp library.
Patch	Displays/Edit/Creates the patch.
DMX Mimic	Reserved for furture use.
World View	Displays/Hides the world view.

Format Menu

This menu contains all of the formatting related commands.

Command	Function
Properties	Displays the properties of the currently selected entity.
Send to Back	Sends the currently selected entity to the rear of the drawing list.
Bring Forward	Brings the currently selected entity to the front of the redraw list.
Align	Aligns a group of entitys
Renumber Fixtures	Renumbers the designs fixtures.
Reload Symbols	Reloads all of the designs symbols from the system libraries.

Tools Menu

This menu contains all of drawing setup commands.

Command	Function
Drawing Setup	Displays the drawing setup window.
Reset Toolbars	Resets all the toolbars to the default positions.
Scene Names	Displays the scene namewindow.
Project Details	Dispays the project details window.
Suppliers Details	Dislays the suppliers library.
Project Notes	Opens a basic text editor for project related notes.

Reports Menu

This menu contains all of the reporting commands.

Command	Function
System	Displays the list of system reports and allows each to be run.
User	Displays the list of user reports and allows each to be run.
Short Form	Displays the list of shot form reports and allows each to be run.

Window Menu

This menu contains all of the standard window manipulation commands.

Command	Function
Cascade	Arranges the windows so that they overlap with their title bars visible.
Tile	Arranges the windows so that they are equal size and side by side.
Arrange Icons	Arranges any window icons allong the bottom of the application desktop.

Help Menu

This menu contains all of the help related commands.

Command	Function
Contents	Displays the applications help file.
What Is This	Enters what's this help.
Select Language	Allows the applications lanaguage to be selected.
LxDesigns Home Page	Opens the home page of the LxDesigns website.
LxDesigns Members Page	Opens the members page of the LxDesigns website.
Register	Displays the applications software registeration window.
About	Displays the applications about window.

The Report Menus

The report window menus provide access to functions such as report management, printing and various editing tools.

File Menu

This menu contains all of the file and print related commands.

Command	Function	
Save As	Saves the report in one of 5 formats.	
Save in HirePoint Format	Saves the equipment report in HirePoint format.	
Specify Stock File	Specifys the stock file to be used.	
Edit Stock File	Opens a stock file for editing.	
Specify Hire/Sales File	Specifys the hire/sales file to be used.	
Edit Hire/Sales File	Opens a hire/sales file for editing.	
Page Setup	Sets the page layout for the report up.	
Print Preview	Displays a print preview of the report.	
Print	Prints the report.	
Report Configuration	Sets the report configuration.	

Edit Menu

This menu contains all of the editing related commands.

Command	Function
Сору	Copys the selected text.
Select All	Selects all of the reports text.
Find	Locate text within the report.
Find Next	Repeat the Find command.
Renumber Fixtures	Renumber the fixtures.

Controlling Views

This chapter explains how to move around the plan and control which entities are displayed on the plan.

Topics covered in this chapter are:

Topic	Page
Hiding Layers	3.2
Enabling and Disabling Layers	3.3
Zooming into an Area of the Plan	3.4
Zooming In and Out	3.5
Redrawing the Current View	3.5
Viewing the Complete Plan	3.6
Panning Across the Plan	3.6
Returning to the Previous View	3.6
Defining and Using Preset Views	3.7
Viewing an Elevation	3.9
Viewing the plan in Perspective	3.9
Using the Perspective Camera Controls	3 10

Hiding Layers

Layers can be turned on or off by using the **Set Layers On/Off** button on the layers toolbar. If a layer is turned off then any objects which are on that layer will not be displayed.

The following example shows that the floor plan, dimmer numbers and gobo layers are hidden while all others are displayed.



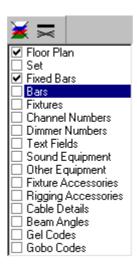
To Hide or Show a Layer

- 1. Click **Set Layers On/Off** on the layers toolbar. This will display a drop down list of all the available layers.
- 2. Click on the **tick box** of the layer which you wish to show or hide. A tick next to a layer name will display any objects on that layer.
- 3. Click Set Layer On/Off to hide the drop down list and apply the layer display options you have set.

Enabling and Disabling Layers

Layers can be enabled or disabled by using the **Protect Layers** button on the Layers toolbar. If a layer is disabled then no object on that layer can be selected and hence modified.

The following example shows that the fixed bars and floor plan layers are disabled while all others are enabled.



To Enable or Disable a Layer

- 1. Click Protect Layers on the layers toolbar. This will display a drop down list of all the available layers.
- Click on the **tick box** of the layer which you wish to enable or disable. A tick next to a layer name will protect any objects on that layer.
- 3. Click Protect Layers to hide the drop down list and apply the layer protection options you have set.

Zooming into an Area of the Plan

This command allows you to zoom into an area of the plan which is defined by a rectangle which you draw on the plan.

To View an Area of the Plan

Either:

- 1. Click **Zoom Window** on the **Zooming** toolbar.
- 2. Drag a selection box around the area which you wish to zoom into.
- Release the mouse button and the plan window will be updated.
 or
- 1. Press **F9**
- Drag a selection box around the area which you wish to zoom into.
- 3. Release the mouse button and the plan window will be updated. *or*
- 1. Right-click on the plan in free space.
- 2. Click **Zoom Window** from the pop-up menu.
- 3. Drag a selection box around the area which you wish to zoom into
- 4. Release the mouse button and the plan window will be updated.

Zooming In and Out

These commands allow you to zoom in and out of the plan by a factor of two each time. Two commands are provided one for zooming in and the other for zooming out.

To Zoom In

Either:

1. Click **2 Zoom In** on the **Zooming** toolbar.

01

1. Press **F12**

or

- 1. Right-click on the plan in free space.
- 2. Click **Zoom In** from the pop-up menu.

To Zoom Out

Either:

1. Click **Zoom Out** on the **Zooming** toolbar.

or

1. Press **F11**

or

- 1. Right-click on the plan in free space.
- 2. Click **Zoom Out** from the pop-up menu.

Redrawing the Current View

This funtion performs a complete redraw of the current view. This is useful if the current of view of the plan has become corrupted for any reason.

To Redraw the Current View

Either:

1. Press **F8**

or

- 1. Right-click on the plan in free space.
- 2. Click **Full Redraw** from the pop-up menu.

Viewing the Complete Plan

This command allows the complete plan to be displayed in the plan window. It uses the maximum floor area values which were entered when the design was created to perform this.

To View the Complete Plan

Either:

1. Click Zoom Full on the Zooming toolbar.

or

1. Press **F10**

or

- 1. Right-click on the plan in free space.
- 2. Click **Zoom Full** from the pop-up menu.

Panning Across the Plan

Panning around the plan is achieved by using the scroll bars

To Pan around the Plan

Either:

 Click or drag the bottom to scroll bar to scroll the plan in a horizontal direction

or

 Click or drag right hand scroll bar to scroll the plan in a vertical direction

Returning to the Previous View

This command allows you to switch between the current view of the plan and the previous one.

To return to the Previous View

1. Click Previous View on the Zooming toolbar.

Defining and Using Preset Views

Preset views allow you to zoom in and pan to a particular area of the plan, ie. FOH and to save this as a 'view'. This then allows the area of the plan defined by the view to be recalled at any time, removing the need to zoom and pan back to the area of the plan. Views are saved or recalld by using the Prset Views palette. If 'dock palettes' is enabled on the Drawing Setup dialog then the palette will automatically dock on the right hand side of the screen when opened.



To define a Preset View

- 1. Zoom and/or pan to the required area of the plan.
- 2. Click Views on the **Zooming** toolbar to display the Preset Views palette.
- 3. Enter the **name** for the view into the Name text box.
- 4. Click Add on the preset views palette.

To recall a Preset View

- 1. Click Views on the **Zooming** toolbar to display the Preset Views palette.
- 2. Click on the required view in the list box.

Using Display/Window Layouts

Display/Window layouts allow the current settings such as displayed layers, fixture attribute settings to be saved and recalled. This is useful when a particular setting is required when printing out the plan. For example one setting could define a layout for the colour call and another for channel numbering. Display and window layouts are saved and recalled via the Display/Window Layouts dialog.



To Save a Display/Window Layout

- 1. Set the required visible layers and fixture attributes.
- 2. Click **Display/Window Layouts** from the **File** menu.
- 3. Click **New** on the Display/Window Layout dialog.
- 4. Enter the name of the new Display/Window layout.
- 5. Click **OK** to save the new layout or **Cancel** to abandon the process.

To Recall a Display/ Window Layout

- 1. Click **Display/Window Layouts** from the **File** menu.
- 2. Click on the required layout in the list box.
- 3. Click **Load** to recall the layout.

Viewing an Elevation

Elevations of the plan can be viewed by taking a slice through the design either horizontally or vertically. These commands are any available if the LxElevation add-in has been purchased.

To display a Side Elevation

- 1. Click Side Elevation on the Zooming toolbar.
- 2. Drag the selection line across the plan to the position that the slice is to be taken.
- 3. Release the mouse button and a new plan window will be opened displaying the side elevation.

To display a Front Elevation

- 1. Click Front Elevation on the Zooming toolbar.
- 2. Drag the selection line across the plan to the position that the slice is to be taken.
- Release the mouse button and a new plan window will be opened displaying the side elevation.

Viewing the plan in Perspective

A perspective view of the plan can be viewed simply by clicking on the perspective button. These commands are any available if the LxPerspective add-in has been purchased.

To display a Perspective View

1. Click Perspective on the **Zooming** toolbar. This will open a new plan window displaying the perspective view.

To move around the perspective view use the camera controls displayed on the right-hand side of the window.

Using the Perspective Camera Controls

These controls allow the camera used to display the perspective view to be moved around. Hence allowing the design to be viewed from any angle. These controls are any available if the LxPerspective add-in has been purchased.

Command	Function
Camera Forward	Moves the camera into the design.
Camera Backward	Moves the camera out of the design.
Camera Left	Moves the camera to the left.
Camera Right	Moves the camera to the right.
A Camera Up	Moves the camera up the design.
Camera Down	Moves the camera down the design.
Reset Camera	Resets the camera to its default position.
Rotate Left	Rotates the camera round the left of the design.
Rotate Right	Rotates the camera round the right of the design.
Rotate Forward	Rotates the camera over the top of the design.
Rotate Backward	Rotates the camera under the design.

Primitives

This chapter explains how to add primitives to the plan and modify their properties. Primitives are the basic building blocks used within LxDesigner to create a plan or symbol.

Topics covered in this chapter are:

Topic	Page	
Adding Primitives to the Plan	4.9	
Specifing the Default Drawing Parameters	4.10	
Modifing a Primitive's Properties	4.31	
Creating Groups	4.45	

Adding Primitives to the Plan

Primitives are used to draw lines, polygons, text and other basic 2 or 3 dimensional shapes. Each type of primitive is added in a different way depending on its requirements. Some may require a single point to be entered where as others may require a number of points. All points of a primitive will snap to the nearest drawing point depending on which snapping mode has been selected.

Primitives are added by entering **Add** mode and selecting the required entity from the Primitives toolbar. The available primitives have been split into a number of groups, which may contain a single primitive or a collection of similar primitives. The available groups are:

Group	Function
Point	Draw points in various shapes.
Line	Draw lines or polylines.
Polygon	Draw rectangles or polygons.
Ellipse	Draw circles or ellipses.
Text	Draw single, multi line text.
Arc	Draw arcs.
Image	Insert images.
3D	Draw 3D objects.
Group	Insert groups.
Outlet	Insert outlets.
Cable Run	Draw cable runs.
Pairing Lines	Draw pairing lines.
Dimensions	Draw dimensions.
Special	Insert special symbols.
Focus Point	Insert focus points.

To select a Primitive within a Primitive Group

If a primitive group contains more then one primitive then it is possible to select the active primitive by:

- 1. Click on the current primitive displayed for the group and hold the button down until a drop down panel is displayed.
- 2. Click on the required primitive, the drop down panel will disappear and the toolbar button updated.

Point Group

Use this group of primitives to add a point to the drawing.

Command	Function
+ Cross	Inserts a cross point.
Square	Insert a square point.
Diamond	Insert a diamond point.
Triangle	Insert a triangle point.
Circle	Insert a circle point.

To Insert a Point

- 1. Click Add Mode on the General toolbar.
- 2. Click +, ■, ♠, ♠ or ▶ Point on the Primitives
- 3. Set the required snap mode.
- 4. Click on the drawing area at the required position to add the point.

Line Group

Use this group of primitives to add lines to the drawing. These can be single or double lines between two points or a series of lines between consecutive points.

Primitive	Function
Line	Draws a single line beween two points.
Double Line	Draws a double line between two points.
Polyline	Draws a series of lines between consecutive points as a single entity.

To Draw a Line

- 1. Click Add Mode on the General toolbar.
- 2. Click Line on the Primitives toolbar.
- 3. Set the required snap and lock modes.
- 4. Click on the drawing area at the required starting point.
- 5. Move the mouse to draw the line and click at the second point.

To Draw a Double Line

- 1. Click Add Mode on the General toolbar.
- 2. Click Double Line on the Primitives toolbar.
- 3. Set the required snap and lock modes.
- 4. Click on the drawing area at the required starting point.
- 5. Move the mouse to draw the line and click at the second point.

To Draw a Polyline

- 1. Click Add Mode on the General toolbar.
- 2. Click Polyline on the Primitives toolbar.
- 3. Set the required snap and lock modes.
- 4. Left click on the drawing area at the required starting point.
- 5. Move the mouse to draw the line and click at the next point.
- 6. Repeat step 5 for all points that make up the series of lines.
- 7. To define the last point either double click at the last point or select **Finish** from the pop up menu.

Polygon Group

Use this group of primitives to add a regular and irregular shapes to the drawing.

Primitive	Function
Rectangle	Draws a single rectangle between two points.
Double Rectangle	Draws a double rectangle between two points as a single entity.
Polygon	Draws a multi sided shape with consecutive points as a single entity.
△ Triangle	Draws a triangle between two points.
Right Angle Triangle	Draws a right angle triangle between two points.

To Draw a Rectangle

- 1. Click Add Mode on the General toolbar.
- 2. Click Rectangle on the Primitives toolbar.
- 3. Set the required snap and lock modes.
- 4. Left click on the drawing area at the required starting point.
- 5. Move the mouse to draw the rectangle and click at the second point.

To Draw a Double Rectangle

- 1. Click Add Mode on the General toolbar.
- 2. Click Double Rectangle on the Primitives toolbar.
- 3. Set the required snap and lock modes.
- 4. Left click on the drawing area at the required starting point.
- 5. Move the mouse to draw the rectangle and click at the second point.

To Draw a Polygon

- 1. Click Add Mode on the General toolbar.
- 2. Click Polygon on the Primitives toolbar.
- 3. Set the required snap and lock modes.
- 4. Left click on the drawing area at the required starting point.
- 5. Move the mouse to draw the line and click at the second point.
- 6. Repeat step 5 for all points that make up the series of lines.
- 7. To define the last point either double click at the last point or select **Finish** from the pop up menu.

To Draw a Triangle

- 1. Click Add Mode on the General toolbar.
- 2. Click Triangle on the Primitives toolbar.
- 3. Set the required snap and lock modes.
- 4. Left click on the drawing area at the required starting point.
- 5. Move the mouse to draw the triangle and click at the second point.

To Draw a Right Angle Triangle

- 1. Click Add Mode on the General toolbar.
- 2. Click Right Angle Triangle on the Primitives toolbar.
- 3. Set the required snap and lock modes.
- 4. Left click on the drawing area at the required starting point.
- 5. Move the mouse to draw the line and click at the second point.

Ellipse Group

Use this group of primitives to add a ellipses and circles to the drawing.

Primitive	Function
Ellipse	Draws an ellipse based on a centre point and it's radius.
Circle	Draws a circle based on a centre point and it's radius.

To Draw a Ellipse

- 1. Click Add Mode on the General toolbar.
- 2. Click Ellipse on the Primitives toolbar.
- 3. Set the required snap and lock modes.
- 4. Click on the drawing area at the required centre of the ellipse.
- 5. Move the mouse to draw the ellipse and left click at the second point.

To Draw a Circle

- 1. Click Add Mode on the General toolbar.
- 2. Click Circle on the Primitives toolbar.
- 3. Set the required snap and lock modes.
- 4. Left click on the drawing area at the required centre of the
- 5. Move the mouse to draw the circle and left click at the second point.

Text Group

Use this group of primitives to add a text to the drawing.

Primitive	Function
A Single Line Text	Inserts a single line of Text.
Multi Line Text	Inserts multi line Text.
Callout	Inserts multi line Text with an arrow.

To Insert Single Line Text

- 1. Click Add Mode on the General toolbar.
- 2. Click **A Text** on the **Primitives** toolbar.
- 3. Set the required snap and lock modes.
- 4. Click on the drawing area at the required start point for the text.
- 5. Enter the require text into the **Text Editor**.
- 6. Click **OK** to add the text.

To Insert Multi Line Text

- 1. Click Add Mode on the General toolbar.
- 2. Click Multi Line Text on the Primitives toolbar.
- 3. Set the required snap and lock modes.
- 4. Click on the drawing area at the required start point for the text.
- 5. Enter the require text into the **Text Editor**.
- 6. Click **OK** to add the text.

To Insert a Callout

- 1. Click Add Mode on the General toolbar.
- 2. Click Callout Box on the Primitives toolbar.
- 3. Set the required snap and lock modes.
- 4. Click on the drawing area at the required start point for the callout line.
- 5. Move the mouse to draw the line and click at the second point, where the text is to be placed.
- 6. Enter the require text into the **Text Editor**.
- 7. Click **OK** to add the text.

Arc Group

Use this group of primitives to add arcs to the drawing.

Primitive	Function
90 degree Arc	Draws a 90 degree arc based on a centre point and it's radius.
180 degree Arc	Draws a 180 degree arc based on a centre point and it's radius.
Variable degree Arc	Draws a variable arc based on a centre point, its radius and a start and end point

To Draw a 90 degree Arc

- 1. Click Add Mode on the General toolbar.
- 2. Click 90 degree Arc on the Primitives toolbar.
- 3. Set the required snap and lock modes.
- 4. Left click on the drawing area at the required centre of the ellipse which the arc forms part of.
- 5. Move the mouse to draw the arc and click at the second point.

To Draw a 180 degree Arc

- 1. Click Add Mode on the General toolbar.
- 2. Click 180 degree Arc on the Primitives toolbar.
- 3. Set the required snap and lock modes.
- 4. Click on the drawing area at the required centre of the ellipse which the arc forms part of.
- 5. Move the mouse to draw the arc and click at the second point.

To Draw a Variable Arc

- 1. Click Add Mode on the General toolbar.
- 2. Click Variable Degree Arc on the Primitives toolbar.
- 3. Set the required snap and lock modes.
- 4. Click on the drawing area at the required centre of the circle which the arc forms part of.
- 5. Move the mouse to draw a circle which represents the radius of the arc and click at this point.
- 6. Move the mouse to the starting point of the arc on the circle and click at this point.
- 7. Move the mouse to draw the arc and left click at the finish point for the arc.

Image Group

Use this primitive to add a bitmap image to the drawing.

Primitive	Function
Image	Inserts an Image into the drawing.

To Insert an Image

- 1. Click Add Mode on the General toolbar.
- 2. Click Image on the Primitives toolbar.
- 3. Set the required snap and lock modes.
- 4. Click on the drawing area at the top left hand corner of the image.
- 5. Move the mouse to draw a rectangle which the image is to be loaded into and click at this point.
- 6. From the open file requester locate the required file and click **OK**, to insert the image.

3D Group

Use this group of primitives to add 3D objects to the drawing. This group of primitives are only available in the Standard package and not the *Lite* one.

Primitive	Function
Cube	Draws an Cube.
Cylinder	Draws a Cylinder.
Sloping Cylinder	Draws a Sloping Cylinder.
Cone	Draws a Cone.
3D Polygon	Draws a 3D Polygon.
3D Polyline	Draws a 3D Polyline.

To Draw a Cube

- 1. Click Add Mode on the General toolbar.
- 2. Click Cube on the **Primitives** toolbar.
- 3. Set the required snap and lock modes.
- 4. Left click on the drawing area at the required starting point.
- 5. Move the mouse to draw the rectangle and click at the second point.
- To set the depth and height of the cube use the **Properties** window for the cube.

To Draw a Cylinder

- 1. Click Add Mode on the General toolbar.
- 2. Click Cylinder on the Primitives toolbar.
- 3. Set the required snap and lock modes.
- 4. Left click on the drawing area at the required starting point.
- 5. Move the mouse to draw the rectangle and click at the second point.
- 6. To set the depth and height of the cylinder use the **Properties** window for the cylinder.

To Draw a Sloping Cylinder

- 1. Click Add Mode on the General toolbar.
- 2. Click Sloping Cylinder on the Primitives toolbar.
- 3. Set the required snap and lock modes.
- 4. Left click on the drawing area at the required starting point.
- 5. Move the mouse to draw the rectangle and click at the second point.
- 6. To set the depth and height of the sloping cylinder use the **Properties** window for the sloping cylinder.

To Draw a Cone

- 1. Click Add Mode on the General toolbar.
- 2. Click Cone on the Primitives toolbar.
- 3. Set the required snap and lock modes.
- 4. Left click on the drawing area at the required starting point.
- 5. Move the mouse to draw the cone and click at the second point.
- To set the depth and height of the cone use the **Properties** window for the cone.

To Draw a 3D Polygon

- 1. Click Add Mode on the General toolbar.
- 2. Click 3D Polygon on the Primitives toolbar.
- 3. Set the required snap and lock modes.
- 4. Left click on the drawing area at the required starting point.
- 5. Move the mouse to draw the line and click at the second point.
- 6. Repeat step 5 for all points that make up the series of lines.
- 7. To define the last point either double click at the last point or select **Finish** from the pop up menu.
- 8. To set the depth and height of the 3D Polygon use the **Properties** window for the 3D Polygon.

To Draw a 3D Polyline

- 1. Click Add Mode on the General toolbar.
- 2. Click 3D Polyline on the Primitives toolbar.
- 3. Set the required snap and lock modes.
- 4. Left click on the drawing area at the required starting point.
- 5. Move the mouse to draw the line and click at the next point.
- 6. Repeat step 5 for all points that make up the series of lines.
- 7. To define the last point either double click at the last point or select **Finish** from the pop up menu.
- 8. To set the depth and height of the 3D Polygon use the **Properties** window for the 3D Polygon.

Insert Group or Symbol

These primitives allows a group or symbol to be added to the drawing. The group or symbol must already of been created and saved to disk. Refer to the section on Symbols for details on how to add symbols.

Primitive	Function
Group	Inserts a Group into the drawing.
¹Symbol	Inserts a Symbol into the drawing.

To Insert a Group

- 1. Click Add Mode on the General toolbar.
- 2. Click Group on the Primitives toolbar.
- 3. Set the required snap and lock modes.
- 4. Click on the drawing area at the point where the group is to be inserted.
- 5. From the open file requester locate the required group file and click **OK**, to insert the group.

To Insert a Symbol

- 1. Click Add Mode on the General toolbar.
- 2. Click Symbol on the Primitives toolbar.
- 3. Set the required snap and lock modes.
- Click on the drawing area at the point where the symbol is to be inserted.
- 5. Repeat step 4 for further instances of the same symbol.

Insert Outlet

This primitive allows an outlet to be added to the drawing. The symbol for an outlet is predefined but can be changed by replacing the Outlet.sym. This primitive is only available in the Standard package and not the *Lite* one.

Primitive	Function
Outlet	Inserts an outlet into the drawing.

To Insert a Outlet

- 1. Click Add Mode on the General toolbar.
- 2. Click Outlet on the Primitives toolbar.
- 3. Set the required snap and lock modes.
- 4. Click on the drawing area at the point where the outlet is to be inserted.

Cable Run Group

This primitive allows a cable run to be added to the drawing. This primitive is only available in the Standard package and not the *Lite* one.

Primitive



Function

Draws a Cable Run between consective points.

To Insert a Cable Run

- 1. Click Add Mode on the General toolbar.
- 2. Click Cable Run on the Primitives toolbar.
- 3. Set the required snap and lock modes.
- 4. Click on the drawing area at the required starting point.
- 5. Move the mouse to draw the line and left click at the next point.
- 6. Repeat step 5 for all points that make up the sections of the cable run.
- 7. To define the last point either double click at the last point or select **Finish** from the pop up menu.Left click on the drawing area at the point where the group is to be inserted.
- 8. The cable builder will now be displayed where the actual cables are selected to make up the run.

Pairing Line Group

Use this group of primitives to add pairing line entities to the drawing. These can be used as a graphical indication of fixtures which are paired.

Primitive	Function
Horizontal	Draws a horizontal pairing line.
Vertical	Draws a vertical pairing line.
L Horizontal Corner	Draws a horizontal corner pairing line.
Vertical Corner	Draws a vertical corner pairing line.
Horizontal Split	Draws a horizontal split pairing line.
Vertical Split	Draws a vertical split pairing line.
Parallel	Draws a parallel pairing line.

To Draw a Horizontal Pairing Line

- 1. Click Add Mode on the General toolbar.
- 2. Click Horizontal on the Primitives toolbar.
- 3. Set the required snap and lock modes.
- 4. Click on the drawing area at the required start of the pairing line.
- 5. Move the mouse to draw a line which joins the two points which the pairing line is to be draw between and click at this point..
- 6. Move the mouse to position the pairing line at the required point and click at this point.

To Draw a Vertical Pairing Line

- 1. Click Add Mode on the General toolbar.
- 2. Click Vertical on the Primitives toolbar.
- 3. Set the required snap and lock modes.
- 4. Click on the drawing area at the required start of the pairing line
- 5. Move the mouse to draw a line which joins the two points which the pairing line is to be draw between and click at this point..
- 6. Move the mouse to position the pairing line at the required point and click at this point.

To Draw a Horizontal Corner Pairing Line

- 1. Click Add Mode on the General toolbar.
- 2. Click Horizontal Corner on the Primitives toolbar.
- 3. Set the required snap and lock modes.
- 4. Click on the drawing area at the required starting point.
- 5. Move the mouse to draw the pairing line and click at the second point.

To Draw a Vertical Corner Pairing Line

- 1. Click Add Mode on the General toolbar.
- 2. Click Vertical Corner on the Primitives toolbar.
- 3. Set the required snap and lock modes.
- 4. Click on the drawing area at the required starting point.
- 5. Move the mouse to draw the pairing line and click at the second point.

To Draw a Horizontal Split Pairing Line

- 1. Click Add Mode on the General toolbar.
- 2. Click Horizontal Split on the Primitives toolbar.
- 3. Set the required snap and lock modes.
- 4. Click on the drawing area at the required starting point.
- 5. Move the mouse to draw the pairing line and click at the second point.

To Draw a Vertical Split Pairing Line

- 1. Click Add Mode on the General toolbar.
- 2. Click Vertical Split on the Primitives toolbar.
- 3. Set the required snap and lock modes.
- 4. Click on the drawing area at the required starting point.
- 5. Move the mouse to draw the pairing line and click at the second point.

To Draw a Parallel Pairing Line

- 1. Click Add Mode on the General toolbar.
- 2. Click Parallel on the Primitives toolbar.
- 3. Set the required snap and lock modes.
- 4. Click on the drawing area at the required start of the pairing bar.
- 5. Move the mouse to draw a line which joins the two points which the pairing line is to be draw between and click at this point..
- 6. Move the mouse to position the pairing line at the required point and click at this point.

Dimension Group

Use this group of primitives to add dimension entities to the drawing.

Primitive	Function
Horizontal Dimension	Draws a horizontal dimension.
↑ Vertical Dimension	Draws a vertical dimension.
Diagonal Dimension	Draws a diagonal dimesion.

To Draw a Horizontal Dimension

- 1. Click Add Mode on the General toolbar.
- 2. Click Horizontal Dimension on the Primitives toolbar.
- 3. Set the required snap and lock modes.
- 4. Click on the drawing area at the required starting point for the dimension.
- 5. Move the mouse to draw the line and click at the second point defining the end point for the dimension .
- Move the mouse to position the dimension as required and click.

To Draw a Vertical Dimension

- 1. Click Add Mode on the General toolbar.
- 2. Click Vertical Dimension on the Primitives toolbar.
- 3. Set the required snap and lock modes.
- 4. Click on the drawing area at the required starting point for the dimension.
- 5. Move the mouse to draw the line and click at the second point defining the end point for the dimension .
- Move the mouse to position the dimension as required and click.

To Draw a Diagonal Dimension

- 1. Click Add Mode on the General toolbar.
- 2. Click Diagonal Dimension on the Primitives toolbar.
- 3. Set the required snap and lock modes.
- 4. Click on the drawing area at the required starting point for the dimension.
- 5. Move the mouse to draw the line and click at the second point defining the end point for the dimension .
- 6. Move the mouse to position the dimension as required and click.

Special Group

Use this group of primitives to add special objects to the drawing. These include title boxes, keys and note boxes. This group of primitives are only available in the Standard package and not the *Lite* one.

Primitive	Function
Tab Line	Inserts a tab line.
Key Box	Inserts a fixture Key Box.
Title Box	Inserts a Title Box.
Notes Box	Inserts a Notes Box.

To Insert a Tab Line

- 1. Click Add Mode on the General toolbar.
- 2. Click Tab Line on the Primitives toolbar.
- 3. Click on the drawing area at the point where the tab line is to be inserted.

To Insert a Key Box

- 1. Click Add Mode on the General toolbar.
- 2. Click Key Box on the Primitives toolbar.
- 3. Click on the drawing area at the point where the key box is to be inserted.

Note: The key box is only updated when a complete redraw is performed.

To Insert a Title Box

- 1. Click Project Details on the Tools menu.
- 2. Enter the required project details which will then be used in the title box.
- 3. Click Add Mode on the General toolbar.
- 4. Click Title Box on the Primitives toolbar.
- 5. Click on the drawing area at the point where the title box is to be inserted.

To Insert a Notes Box

- 1. Click Add Mode on the General toolbar.
- 2. Click Notes Box on the Primitives toolbar.
- 3. Click on the drawing area at the point where the note box is to be inserted.

Focus Point Group

This primitive allows a focus point to be added to the drawing. This primitive is only available in the Standard package and not the *Lite* one.

Primitive	Function
Focus Point	Inserts a Focus Point into the drawing.

To Insert a Focus Point

- 1. Click **Add Mode** on the **General** toolbar.
- 2. Click **Focus Point** on the **Primitives** toolbar.
- 3. Set the required snap and lock modes.
- 4. Click on the drawing area at the point where the focus point is to be inserted.
- 5. Enter the name of the focus point and click **OK**.

Specifing the Default Drawing Parameters

The default drawing parameters used when drawing primtives are specified on the 'Drawing' toolbar. This toolbar is only enabled when the application is within the 'Add' mode its controls allow such parameters as line style and colour, fill style, text style and layer to be specified. To draw a primitive with a specified style the required style needs to be set on these controls prior to drawing the primtive.

Command	Function
Pen Colour	Sets the current pen colour.
Brush Style	Sets the current brush style.
Line Style	Sets the current line style.
A Text Style	Sets the current text style.
Current Layer	Sets the current layer.

To set the default Pen Colour

- 1. Click Pen Colour on the Drawing toolbar. This will display a drop down panel.
- 2. Click on the required colour.
- 3. Click Pen Colour to hide the drop down panel and apply the new setting.

To set the default Brush Style

- 1. Click Brush Style on the Drawing toolbar. This will display a drop down panel of available styles.
- 2. Click on the required brush style.
- 3. Click Brush Style to hide the drop down panel and apply the new setting.

To set the default Line Style

- 1. Click Line Style on the Drawing toolbar. This will display a drop down panel of available styles.
- 2. Click on the required line style.
- 3. Click Line Style to hide the drop down panel and apply the new setting

To set the default Text Style

- 1. Click Text Style on the Drawing toolbar. This will display a drop down panel of available styles.
- 2. Select the required text style.
- 3. Click Text Style to hide the drop down panel and apply the new setting.

To set the default Layer

- 1. Click **Layer** on the **Drawing toolbar**. This will display a drop down panel of available lines.
- 2. Select the required layer.

Modifing a Primitive's Properties

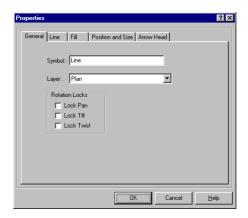
Once a primitive has been drawn on the plan it's properties such as drawing style, position and size can be modified by using the 'Properties' windows. The properties window has a number of pages which are displayed depending on what type of primitive the window is being displayed for.

To modify a Primitives Parameters

- 1. Click on the Primitive, this will select it.
- 2. Right-click inside the red rectangle which has been drawn around the primitive.
- 3. Select **Properties** from the pop up menu.
- 4. Modify the required properties.
- 5. Click **OK** to save the changes or **Cancel** to abandon the changes.

General Properties Sheet

This sheet is visible for all primitives and allows general parameters to be edited.



The controls have the following functions:

Symbol

This control specifies the type of primitive or group name. It can not be modified.

Layer

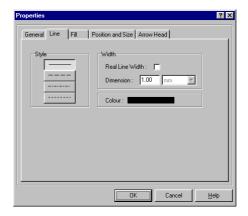
This text box displays the name of the layer which the primitive is currently on. To change the layer click on the arrow and select the new layer from the drop down list.

Rotation Locks

If checked prevent the entity from being rotated if it is used to make up part of a group.

Line Properties Sheet

This sheet is visible for all primitives and allows parameters related to the pen used to draw the primitive to be edited.



Style

Allows the line style used to draw the primitive to be specified.

Width

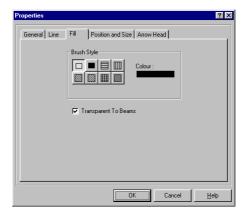
Allows the width of the pen used to draw the primitive to be specified. If real line width is checked then the pen width is specified in real units otherwise it is in screen pixels.

Colour

Allows the colour of the pen which is used to draw the primitive to be specified.

Fill Properties Sheet

This sheet is visible for all primitives and allows parameters related to the brush used to fill an enclosed primitives to be edited.



The controls have the following functions:

Transparent To Beams

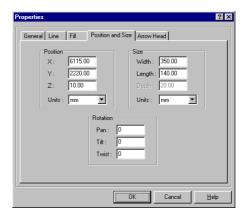
If checked then beams will not be clipped by the primitive. This means that the beam from a fixture will pass straight through the primitive.

Brush Style

Allows the brush style and colour used to fill the primitive to be specified.

Position and Size Properties Sheet

This sheet is visible for all primitives and allows the position, size and rotation of the primitive to be edited.



Position

Allows the position of the primitive to be specified.

Size

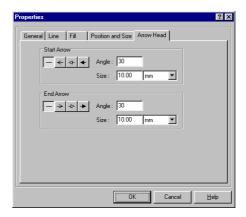
Allows the size of the primitive to be modified.

Rotation

Allows the primitives rotation to be modified.

Arrow Head Properties Sheet

This sheet is visible for line and dimension primitives only. It allows the type and size of the arrow heads to be edited.



Start Arrow

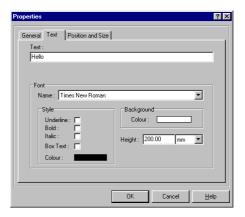
Allows the type, angle and size of the arrow to be drawn on one end of the line or dimension. This is normally the first point for a line primitive.

End Arrow

Allows the type, angle and size of the arrow to be drawn on one end of the line or dimension. This normally the second point for a line primitive.

Text Properties Sheet

This sheet is visible for text and dimension primitives only. It allows the string and font of the entity to be edited.



The controls have the following functions:

Text

Allows the actual text string of the primitive to be edited.

Height

Allows the height of the text to be modified. The drop down list specifies the base units for the height.

Font

Allows the font and height of the text to be specified.

Style

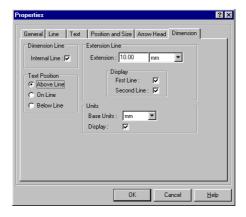
Allows the colour and style of the text to be specified.

Background

Allows the background colour of the text to be specified.

Dimension Properties Sheet

This sheet is visible for dimension primitives only. It allows the various options for drawing the dimension to be modified.



Dimension Line

If checked a line will be drawn between the two extension lines.

Text Position

Allows the position of the dimension text to be specified.

Extension Line

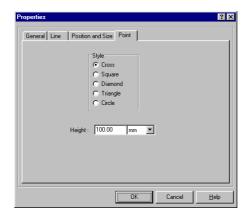
Allows the extension lines at either end of the dimension to the specified.

Units

Allows the base units of the dimension to be specified. If *Display* is checked then the base unit will be appended to the end of the actual dimension.

Point Properties Sheet

This sheet is only visible if the selected primitive is a point.



The controls have the following functions:

Style

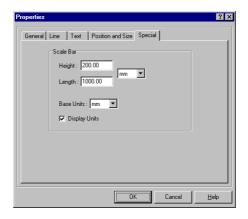
Allows the style of the point entity to be specified.

Height

Allows the height of the point entity to be specified.

Scale Bar Properties Sheet

This sheet is only visible if the selected primitive is a scale bar.



The controls have the following functions:

Height

Allows the height of the scale bar entity to be specified.

Length

Allows the length of the scale bar entity to be specified.

Base Units

Allows the base units of the scale bar entity to be specified. If *Display Units* is checked then the base unit will be appended to the end of the measurements.

Title Box Properties Sheet

This sheet is only visible if the selected primitive is a title box.



The controls have the following functions:

Columns

Allows the number of columns used in the title box entity to be specified.

Drawing Issue

Allows the drawing issue to be specified.

Gaps

This gorup of controls allow the gap between the title box outline and text along with the gap between columns to be specified.

Outline

Allows the gap between the outline of the title box and the internal text to be specified.

Intercolumn

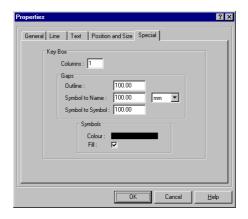
Allows the gap between the columns with in the title box to be specified.

Units

Allows the base units used for the outline and intercolumn values to be specified.

Key Box Properties Sheet

This sheet is only visible if the selected primitive is a key box.



The controls have the following function:

Columns

Allows the number of columns used by the key box to be specified.

Gaps

This gorup of controls allow the gap between the key box outline and symbols, the gap between symbol to name, along with the gap between symbols to be specified.

Outline

Allows the gap between the outline of the key box and the internal symbols and text to be specified.

Symbol to Name

Allows the gap between the symbols and their names to be specified.

Symbol to Symbols

Allows the gap between symbols to be specified.

Symbols

This gorup of controls allow the colour and fill used to draw the symbols to be specified.

Colour

Allows the colour used to draw the symbols to be specified.

Fil

If checked the symbols are also filled with the colour specified by the *Colour* control.

Tab Line Properties Sheet

This sheet is only visible if the selected primitive is a tab line.



The controls have the following function:

Curve Size

Allows the diameter of the curves used to draw the tab line to be specified.

Number of Curves

Allows the number of curves used to draw the tab line to be specified.

Drop

Allows the drop of the tab line to be specified.

Notes Box Properties Sheet

This sheet is only visible if the selected primitive is a notes box.



The controls have the following functions:

Notes

Allows the actual notes to be entered.

Gaps

This gorup of controls allow the gap between the notes box outline and interal text, along with the gap between notes to be specified.

Outline

Allows the gap between the outline of the notes box and the internal text to be specified.

Inter Note

Allows the gap between each note to be specified.

Creating Groups

Groups consist of a collection of primitives that make up an item. Once created and saved to disk the group can be recalled for inclusion in the current design or any future design. Groups are very similar to symbols. The major difference being that a symbol has associated parameters and a group does not.

To Create a Group

- 1. Click Add and draw the required primitives on the plan.
- 2. Click Select on the General toolbar.
- 3. Drag a selection box around all of the primitives that make up the group.
- 4. Right-click within the selection box.
- 5. Select **Save Group** from the pop-up menu. This will display the file save requester.
- 6. Select the required directory and filename.
- 7. Click Save.

Setting the Snap Mode

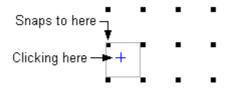
The snap mode defines how coordinates are determined as the mouse moves around the plan. There are a number of modes available depending on which version of the application you are running.

No Snapping

In this mode no snapping is performed. The coordinates follow the mouse as it is moved around the plan.

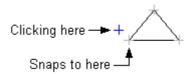
Snap to Grid

In this mode snapping is performed to the nearest working grid point. The working grid is set on the Grid page of the Drawing setup screen. Hence if a working grid of 1 metre is set then as the mouse is moved coordinates will snap to 1 metre intervals.



Snap to Point

In this mode snapping is performed to the nearest point on an entity. This mode is useful if you wish to draw an entity which has to start or finish on a point of an existing entity.



Snap to Right Angle

In this mode snapping is performed to the nearest right angle. As the mouse is moved the coordinate will snap to the nearest right angle i.e. 0, 90, 180 or 270 degree. This mode is useful to draw polylines or polygons which have segments at 90 degrees to each other.



To change the Snap Mode

1. Click on one of the snapping mode buttons on the Snapping Toolbar.

The available modes are:

- No Snapping coordinates follow the mouse
- Snap to Grid coordinates snap to the nearest working grid point
- Snap to Point coordinates snap to the nearest point on an entity.
- Snap to Right Angle coordinates snap to the nearest right angle.

Setting the Lock Mode

The lock mode defines how coordinates are locked as the mouse moves around the plan. This feature is only available in the standard version of the application.

No Lock

In this mode no locking is performed. The coordinates follow the mouse as it is moved around the plan.

Lock Horizontal Movement

In this mode locking is performed in the horizontal direction. This means that as entities are moved around the can only be moved in the vertical direction.

Lock Vertical Movement

In this mode locking is performed in the vertical direction. This means that as entities are moved around the can only be moved in the horizontal direction.

To change the Lock Mode

1. Click on one of the locking mode buttons on the Snapping Toolbar.

The available modes are:

- No Locking coordinates follow the mouse.
- **Lock Horizontal Movement** coordinates are locked in the horizontal direction.
- **Lock Vertical Movement** coordinates are locked in the vertical direction.

Symbols

This chapter explains how to add symbols to the plan and modify their properties. It also covers the creation of new symbols and modification of existing ones.

Topics covered in this chapter are:

Topic	Page
Adding Symbols to the Plan	5.2
Modifing a Primitive's Properties	5.31
Creating Symbols	5.11
Creating Symbol Alternates	5.12
Modifing Library Data	5.12

Adding Symbols to the Plan

Symbols are used to add such items as set items, trussing, bars and fixtures to the plan. LxDesigner holds a number of libraries which are used to hold the symbols, these are:

Library	Function
⚠ Set	Contains the set and staging symbols.
Rigging	Contains the rigging and bar symbols.
F ixture	Contains the fixture symbols.
S ound	Contains sound related symbols.
Miscellanous	Contains various symbols such as smoke machines, mirror balls etc.

Symbols are added to the plan by dragging and dropping them from a library on to the plan. They will snap to the nearest drawing point depending on which snapping mode has been selected.

To Add a Symbol to the Plan (Single)

1. Either:

Click , and or depending on which library is required.

or

Click **Symbol Libraries** on the **View** menu and select the required library.

- 2. Locate the required symbol in the library. To expand the library click +.
- 3. Set the required snap mode.
- 4. Drag and drop the required symbol onto the plan.

To Add a Symbol to the Plan (Multiple)

- 1. Click Add on the General toolbar.
- 2. Click \square Symbol on the **Primitives** toolbar.
- 3. Either:

Click , equired. depending on which library is required.

or

Click **Symbol Libraries** on the **View** menu and select the required library.

- 4. Locate and click on the required symbol in the library. To expand the library click +.
- 5. Set the required snap mode.
- 6. Click on the plan at the required position.
- 7. Either:

Repeat step 6 for multiple instances of the same symbol.

or

Repeat steps 3 to 6 for a different symbol.

Modifing a Symbols Properties

Once a symbol has been drawn on the plan it's properties can be modified by using the 'Properties' windows. The properties window has a number of pages which are displayed depending on what type of symbol the window is being displayed for.

To modify a Symbols Parameters

- 1. Click on the Symbol, this will select it.
- 2. Either:

Click **Properties** on the **Format** menu.

or

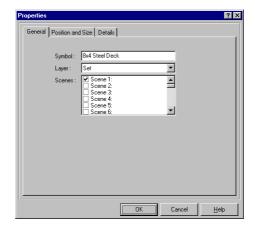
Right-click inside the red rectangle which has been drawn around the primitive.

Select **Properties** from the pop-up menu.

- 3. Modify the required properties.
- 4. Click **OK** to save the changes or **Cancel** to abandon the changes.

General Properties Sheet

This sheet is visible for all symbols and allows general parameters to be edited.



The controls have the following function:

Symbol

This is a read-only text box which displays the symbols name.

Layer

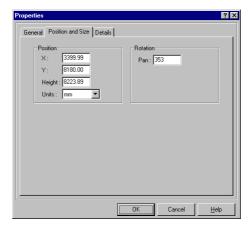
This drop-down box displays the name of the layer which the symbol is currently on. To change the layer click on the arrow and select the new layer from the drop down list.

Scenes

The list of scenes is only displayed for scenic/set entities. It allows the scene which this entity appears in to be specified. The entity will appear in any scene with a tick next to it.

Position Properties Sheet

This sheet is visible for all symbols and allows position and rotation parameters to be edited.



Position

This group of controls allow the positioning of the symbol to be modified.

λ

Allows the symbols' horizontal coordinate to be modified.

Y

Allows the symbols' vertical coordinate to be modified.

Height

Allows the symbols' height to be modified.

Units

Determines what base units are used by the X, Y and Height controls.

Rotation

This group of controls allow the rotation of the symbol to be modified.

Pan

Allows the symbols' pan to be modified. The value is specified in degrees.

Scenic Properties Sheet

This sheet is visible for scenic/set symbols only and allows specific parameters to be edited.



The controls have the following function:

Use Defaults

If checked the brush and pen settings used when the symbol was created are used to draw the entity. Otherwise the values set on this page will be used.

Advanced Properties

This button when clicked displays the advance properties window for a scenic/set symbols.

Brush

This group of controls allow the brush used to fill the entity to be specified.

Style

These buttons allow the style of brush used to fill the entity to be specified. The selected style is indicated by a depressed button.

Colour

Allows the colour used to fill the entity to be specified.

Pen

This group of controls allow the pen used to draw the entity to be specified.

Style

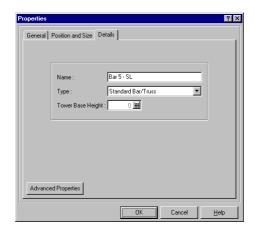
These buttons allow the style of pen used to draw the entity to be specified. The selected style is indicated by a depressed button.

Colour

Allows the colour used to draw the entity to be specified.

Truss/Bar Properties Sheet

This sheet is visible for truss/bar symbols only and allows specific parameters to be edited.



The controls have the following function:

Name

Allows the name used to identify the bar/truss to be specified.

Туре

Allows the bar/truss type to be specified. To change the type click on the arrow and select the new type from the drop down list.

The options are Standard Bar/Truss or Tower

Tower Base Height

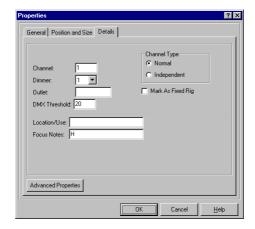
If the type parameter specifys a tower then the base of the tower is entered in this control.

Advanced Properties

This button when clicked displays the advance properties window for a bar/truss symbol.

Fixture Properties Sheet

This sheet is visible for fixture symbols only and allows specific parameters to be edited.



The controls have the following function:

Channel

Allows the current channel number of the fixture to be modified.

Dimmer

Allows the current dimmer number of the fixture to be modified.

Channel Type

Indicates whether the channel number refers to a normal or independent one.

Outlet

This read-only text box displays which outlet the fixture has been plugged up to.

DMX Threshold

Reserved for future use.

Mark As Fixed Rig

Allows the fixture to be marked as being part of a venues fixed rig. If this control is checked then the fixture will be drawn in the colour and style specified for fixed rig fixtures.

Location/Use

Allows the location/use string to be modified.

Focus Note

Allows the focus note to be modified.

Advanced Properties

This button when clicked displays the advance properties window for a fixture symbol.

Colour Changer Properties Sheet

This sheet is visible for colour changer symbols only and allows specific parameters to be edited.



The controls have the following function:

Channel

Allows the current channel number of the fixture to be modified.

Mark As Fixed Rig

Allows the fixture to be marked as being part of a venues fixed rig. If this control is checked then the fixture will be drawn in the colour and style specified for fixed rig fixtures.

Advanced Properties

This button when clicked displays the advance properties window for a fixture symbol.

Creating Symbols

New library symbols that are to be placed into one of LxDesigner's symbol libraries are created from a group of primitives.

To create a new symbol

- 1. Draw the symbol outline using the required primitives. If the new symbol is a fixture then it should be draw pointing the right hand side of the plan. If the new symbol is a piece of trussing or bar then it is draw in a horizontal orientation.
- 2. Either:

Click , , or depending on which library is required.

or

Click **Symbol Libraries** on the **View** menu and select the required library.

- 3. Click Select on the General toolbar.
- 4. Drag a selection box around all of the primitives that make up the symbol.
- 5. Click on the yellow **Move** control and while holding down the mouse button drag and drop the symbol over the required library node within one of the symbol libraries. A library node is identified by an adjacent +/- symbol to the left of it's name.
- This will create the symbol and display the Library Data Requester.
- 7. Enter the new symbols **name**. If you enter a symbol name that already exists then it will over write the existing symbol.
- 8. Select the new symbols **category** i.e. Generic Fixture, Rigging.
- 9. You can now fill in as much detail about the symbol as you wish to.
- 10. Click **OK** to save the new symbol or **Cancel** to abandon the process.

Creating Symbol Alternates

All symbols once defined by the process specified in Adding Symbols to the Plan, can have a number of alternates defined. This is useful if a different representation of the symbol is required on a plan. To create a new symbol alternate follow the procedure for . When requested for the directory and filename to save the group under locate the normal symbol in the libraries and change the file extension to '.a**' where ** is a value from 00 to 09. LxDesigner uses a number of alternate groups for the elevations and perspective add-ins as follows:

```
<filename>.a91 = side elevation of symbol.
```

- <filename>.a92 = front elevation of symbol.
- <filename>.a93 = rear elevation of symbol.
- <filename>.a95 = 3D version of symbol.

Modifing Library Data

Symbols in any of the libraries can have their parameters modified at any time by displaying the library data requester and editing the various parameters displayed.

To Modify an Existing Symbols Parameters

1. Either:

Click , equired. depending on which library is required.

or

Click **Symbol Libraries** on the **View** menu and select the required library.

- 2. Locate the required symbol in the library. To expand the library click +.
- 3. Double-click on the symbol name.
- 4. Make the required changes to the symbols parameters.
- Click **OK** to submit the changes or **Cancel** to abandon any changes.

Editing Entities

This chapter explains how to edit primitives and symbols that have been added to the plan within LxDesigner.

Topics covered in this chapter are:

Topic	Page
Selecting Entities	6.2
Moving Entities	6.2
Rotating Entities	6.3
Resizing Entities	6.3
Deleting Entities	6.4
Copying Entities	6.4
Copying Entity Properties	6.5
Repeating Entities	6.6
Snapping Entities	6.9
Aligning Entites	6.12
Setting the Drawing Order of Entities	6.15

Selecting Entities

The selected colour is specified on the Drawing set up window.

Entities are selected by clicking on them with the left mouse button. If a single entity is under the cursor then a dotted box will be drawn around it to indicate that it is selected and its outline colour will change to that specified by the **Selected Colour**. However if there are multiple entities under the cursor then a pop up menu will be displayed and a dotted box drawn round the first item on the pop up menu. To select a particular item click on that entity on the pop up menu to display the dotted box around it and then click on it again. Positioned on the selection box will be a number of controls. These will depend on the type of entity that has been selected. These controls allow the selected entity to be moved, rotated or resized.

It is also possible to select a group of entities by clicking with the left mouse button on the plan and while holding down the button dragging a dotted box around the required entities. Once all entities are within the box let go of the mouse button and a box will snap around the selected entities and the controls detailed above will be displayed. Entities can also be added to or removed from the selection by holding down the shift key and clicking on the entity with the left mouse button.

Moving Entities

Once an entity has been added to the plan it can be moved to a new location. The basic way of moving an entity is to use the yellow move control which is displayed once the entity has been selected and move it with the mouse. When an entity is being moved it will snap to the nearest point defined by the current snap mode. It is also possible to lock either horizontal or vertical movement by using the locking.

To Move an Entity

- 1. Select the entity.
- 2. Click on the **yellow** move control.
- 3. Use the mouse move the entity around the plan. Do not hold the mouse button down while moving .

Rotating Entities

Once an entity has been added to the plan it can be rotated. The basic way of rotating an entity is to use the red move control which is displayed once the entity has been selected and rotate it with the mouse.

To Rotate an Entity

- 1. Select the entity.
- 2. Click on the **red** rotate control.
- 3. Using the mouse rotate the entity. A line from the centre of the selected entity will follow the mouse to indicate the rotation. Do not hold the mouse button down while moving.

Resizing Entities

Once an entity has been added to the plan it can be resized. The basic way of resizing an entity is to use the blue resize controls which are displayed once the entity has been selected and resize it with the mouse. When an entity is being resized it will snap to the nearest point defined by the current snap mode. It is also possible to lock either horizontal or vertical movement by using the locking.

Note: It is not possible to resize symbols.

To Resize an Entity

- 1. Select the entity.
- 2. Click on one of the **blue** resize controls.
- 3. Move the mouse to resize the entity. Do not hold the mouse button down while moving .

Deleting Entities

Once an entity has been added to the plan it can be removed by selecting and deleting it.

To Delete an Entity

1. Select the entity.

Either:

- 2. Right-click within the selection rectangle.
- 3. Click Delete
- 4. If the **Delete Verification** option is enabled then click **OK** to delete the entity or **Cancel** to abandon the operation.

Or

- 2. Press **Del**
- 3. If the **Delete Verification** option is enabled then click **OK** to delete the entity or **Cancel** to abandon the operation.

Copying Entities

Once an entity has been placed on the drawing it is possible to copy it and place the new entity anywhere on the plan.

To Copy an Entity

1. Select the entity.

Either:

- 2. Right-click within the selection rectangle.
- 3. Click Copy
- 4. Move the mouse to position the new copy and click.

or

- 2. Press CTRL + C
- Move the mouse to the position for the new copy and press CTRL + V
- 4. Repeat step 3 if further copies are required.

Copying Entity Properties

This command allows the properties of one entity to be copied to another. These can be pen and brush style for primitives or channel, gel or focus note information for fixtures. The command is only available in the standard version of LxDesigner and not the *Lite* one.

To Copy a Entities Properties to Another Entity

- 1. Select the entity to copy.
- 2. Using the **Quick Properties** toolbox select the properties to be copied.
- 3. Press CTRL + C.
- 4. Move the mouse over the entity to be changed and press **CTRL** + **A**.
- 5. Repeat step 3 if further entities are to be modified.

Repeating Entities

Entites can be step and repeated onto the drawing to form either a single horizontal/vertical line or an array of entities. The number of entities repeated and the offset between each one is set using the Step and repeat requester.



Horizontal

This group of controls set the horizontal offset between the entities and the number of entities to be created.

Offset

Enter a value in this box to specify the horizontal offset between enitities.

Count

Enter a value in this box to specify the number of horizontal enitities.

Vertical

This group of controls set the vertical offset between the entities and the number of entities to be created.

Offset

Enter a value in this box to specify the vertical offset between enitities.

Count

Enter a value in this box to specify the number of vertical enitities.

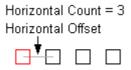
Units

Click in this drop-down box to specify the base units for the horizontal and vertical offset values.

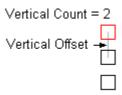
Mode

This set of buttons sets which type of line or array is created as follows:

Use **Horizontal Line** to create a horizontal line of entities which match the selected one.



Use **Vertical Line** to create a vertical line of entities which match the selected one.



Use **Array** to create an array of the selected entity.

	ntal Count =	4	
venica	I Count = 3		
H	lorizontal O	ffset	
Vertical Offset	-		

To Repeat an Entity to Create a Line

- 1. Select the entity to repeat.
- 2. Right-click within the selection rectangle.
- 3. Click Step and Repeat.
- 4. Either:

Click **Horizontal Line** in the Mode box.

or

Click **Vertical Line** in the Mode box.

- 5. Set the base units for the offset dimension in the Units box.
- 6. Enter the offset required for each copy of the entity into the Offset box.
- 7. Enter the number of copies to be made into the Count box.
- 8. Click **OK** to complete the process or **Cancel** to abandon the changes.

To Repeat an Entity to Create an Array

- 1. Select the entity to repeat.
- 2. Right-click within the selection rectangle.
- 3. Click Step and Repeat.
- 4. Click **Array** in the Mode box.
- 5. Set the base units for the offset dimensions in the Units box.
- 6. Enter the horizontal offset required for each copy of the entiy into the Horizontal Offset box.
- 7. Enter the number of horizontal copies to be made into the Horizontal Count box.
- 8. Enter the vertical offset required for each copy of the entity into the Vertical Offset box.
- 9. Enter the number of vertical copies to be made into the Vertical Count box.
- 10. Click **OK** to complete the process or **Cancel** to abandon the changes.

Snapping Entities

Entities can be snapped together by using the **Snap To** option from the pop-up menu of the entity. This is useful when aligning entities such as flats or truss. However the snapping is not permanent, this means that if one of the entities is moved then the other will not automatically move with it. Snapping works on a bounding rectangle around the entities. The snapping mode and offsets are specified on the Snap From - To requester which is displayed once the two entities hve been selected.



From

This group of buttons specifies which point on the first entity is used to snap from in the snap operation.

To

This group of buttons specifies which point on the second entity is used in the snap operation to snap to.

Offset

This group of controls allow an offset between the two entities to be specified. This can be used when two entities are snapped together but with a horiztonal or vertical offset.

Horizontal

Enter a value in this box to specify the horizontal offset.

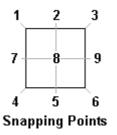
Vertical

Enter a value in this box specifies the vertical offset.

Units

Click in this drop-down box to specify the base units for the horizontal and vertical offset values.

The From and To buttons have the following meanings. The numbers in the brackets refer to the drawing below.



Use **Top Left** (1) to specify the top left corner of the bounding rectangle.

Use **Top Centre** (2) to specify the centre of the top edge of the bounding rectangle.

Use **Top Right** (3) to specify the top right corner of the bounding rectangle.

Use **Bottom Left** (4) to specify the bottom left corner of the bounding rectangle.

Use **Bottom Centre** (5) to specify the centre of the bottom edge of the bounding rectangle.

Use **Bottom Right** (6) to specify the bottom right corner of the bounding rectangle.

Use **Centre Left** (7) to specify the centre of the left hand edge of the bounding rectangle.

Use **Centre** (8) to specify the centre of the bounding rectangle.

Use **Centre Right** (9) to specify the centre of the right hand edge of the bounding rectangle.

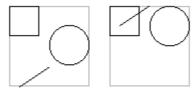
To snap one Entity to another

- 1. Select the entity to be moved.
- 2. Right-click in the selection rectangle.
- 3. Click **Snap To**.
- 4. Move the mouse and Click on the entity to be snapped to. A line will be drawn following the mouse from the centre of the first entity.
- 5. Select the required snapping modes on the Snap From To window.
- 6. Click **OK** to complete the process or **Cancel** to abandon the operation.

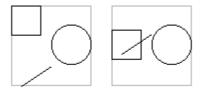
Aligning Entites

Entities can be aligned by using the **Align** option from **Format** option on the main menu. This command is only available when a group of enties has been selected. However the alignment is not permanent, this means that if one of the entities is moved then the others will not maintain any alignment which has been applied. All align commands with the exception of the rotation one work on the bounding rectangle which completely contains all of the entities within the group. The following types of alignment are available:

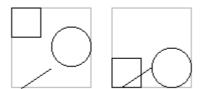
Use **Top** alignment to align the entities with the top of the bounding rectangle.



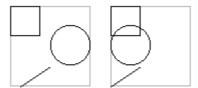
Use **Middle** alignment to align the entities with the horizontal centre line of the bounding rectangle.



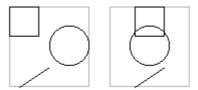
Use **Bottom** alignment to align the entities with the bottom of the bounding rectangle.



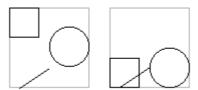
Use **Left** alignment to align the entities with left hand edge of the bounding rectangle.



Use **Centre** alignment to align the entities with vertical centre line of the bounding rectangle.



Use **Right** alignment to align the entities with right hand edge of the bounding rectangle.



Use **Vertical Centre Line** alignment to align the entities with vertical centre line of the plan.

Use **Horizontal Centre Line** alignment to align the entities with horizontal centre line of the plan.

Use **Rotation** alignment the rotation of all the entities within the bounding rectangle

To Align a group of Entities

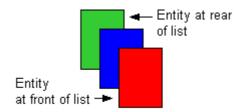
- 1. Select the entities to be aligned.
- 2. Click **Align** on the **Format** option of the main menu.
- 3. Select the required alignment from the menu list.

To Align the Rotation of a group of Entities

- 1. Select the entities to be aligned.
- 2. Click **Align** on the **Format** option of the main menu.
- 3. Click **Rotation** from the Align menu.
- 4. Enter the required rotation in the text box.
- 5. Click **OK** to apply the new rotation or **Cancel** to abandon the operation.

Setting the Drawing Order of Entities

All entities are allocated to a layer when they are added to the plan. However the order in which they are drawn within the layer depends on the order in which they are added. It is possible to move an entity to the rear or front of the drawing list for the layer on which it has been added. This allows a basic idea of depth to be achieved on a 2D drawing. Entities which are at the rear of the list are drawn first with entities at the front of the list drawn over the top.



A list of overlapping Entities

To set the Drawing Order of an Entity

- 1. Select the entity.
- 2. Either

Click **Send to Back** on the **Format** option of the main menu to send the entity to the rear of the list for it's layer.

or

Click **Bring to Forward** on the **Format** option of the main menu to bring the entity to the front of the list for it's layer.

Working wih Scenic Entities

This chapter explains how to work with staging and scenic entities within LxDesigner.

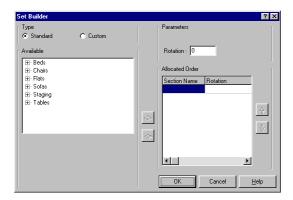
Topics covered in this chapter are:

Topic	Page
Using the Set Builder	7.2
Using Scenes	7.4
Naming Scenes	7.5

Using the Set Builder

Not aviable in the lite version.

The Set Builder allows a length of set to be built up using a number of sections from a specified family or a custom set to be specified. Once the set has been built it will be treated as a single object when being moved or rotated on the plan. However when listed on the equipment usage report each section will be detailed.



Creating a Standard Set

- 1. Click Set Builder on the General toolbar.
- 2. Click on the plan at the point you wish to add the custom set.
- 3. Click **Standard** from the Type box.
- 4. Click on the required set family. This will display all of the available items within the family.
- 5. Select the required item in the **Available** list box.
- 6. Click on the right arrow button. This will add the item to the **Allocated Order** list box.
- 7. Repeat steps 4 to 6 for all of the required items.
- 8. If an incorrect item is added select the section in the Allocated Order list and click on the 'left arrow button' to remove it.
- 9. Items can be moved up and down the order within the Allocated Order list by selecting the item to be moved and clicking on the 'Up or Down arrow buttons'.
- 10. Once all items have been added set the angle box to the required rotation and click **OK**. This will build the set and add it to the plan.

Creating a Custom Set

- 1. Click Set Builder on the General toolbar.
- 2. Click on the plan at the point you wish to add the custom set.
- 3. Select **Custom** from the Type box.
- 4. Select the shape of the custom Set.
- 5. Enter the required parameters, such as length, width and thickness.
- 6. Click **OK**. This will build the set and add it to the plan.

Using Scenes

When adding a scenic entity to the design it is possible to specify which scene it relates to. This allows scenic entity of different scenes to be hidden if not required at any stage of the design.

To Assign a Scenic Entity to a Scene

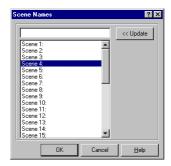
- 1. Select the scenic entity.
- 2. Right-click within the selection rectangle.
- 3. Click **Properties** from the pop-up menu.
- 4. Click **General** on the tabs at the top of the properties dialog.
- Click on the tick box next to the required scenes for the entity.
 Note: A tick indicates that the entity will be included in that scene
- 6. Click **OK** to apply the new settings or **Cancel** to abandon the changes.

To Hide or Show a Scene

- 1. Click Turn Scenes On/Off on the Layers toolbar. This will display a drop down list of all the available scenes.
- Click on the **tick box** of the scene which you wish to show or hide. A tick next to a scene name will display any objects in that scene.
- 3. Click Turn Scenes On/Off to hide the drop down list and apply the scene display options you have set.

Naming Scenes

With LxDesigner there are upto 32 different scenes which can be used. Each of these can have a name associated with it to help when allocating scenic entities to scenes. Scene names are entered via the scene names dialog.



To Allocate a Scene Names

- 1. Click **Scene Names** from the **Tools** menu. This will displaye the scene names dialog.
- 2. Click on the **scene number** to be changed in the list box.
- 3. Enter the new **name** for the scene in the name box.
- 4. Click **Update** to make the change.
- 5. Repeat steps 2 to 4 for other scenes.
- 6. Click **OK** to apply the changes or **Cancel** to abandon the operation.

Working with Trussing & Bars

This chapter explains how to work with trussing and bars within LxDesigner.

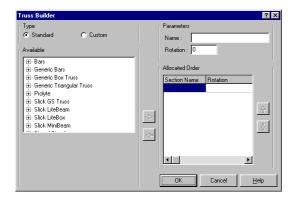
Topics covered in this chapter are:

Topic	Page
Using the Truss Builder	8.2
Setting Bar Visibility and Height	8.4
Copying Bars with their Fixtures	8.5
Mirroring Fixtures on a Bar	8.5
Duplicating Bars	8.6
Moving Fixtures from one Bar to Another	8.6
Creating a Tower or Boom	8.7
Locating Bars by Name	8.8

Using the Truss Builder

Not available in the lite version.

The Truss Builder allows a length of truss to be built up using a number of sections from a specified family or a custom bar to be specified. Once the truss/bar has been built it will be treated as a single object when being moved or rotated on the plan and for the truss rigging and loading reports. However when listed on the equipment usage report each section will be detailed.



Creating a Standard Truss

- 1. Click Truss Builder on the General toolbar.
- 2. Click on the plan at the point you wish to add the custom truss.
- 3. Select **Standard** from the Type box.
- 4. Select the required truss family. This will display all of the available sections within the family.
- 5. Select the required item in the **Available** list box.
- 6. Click on the 'right arrow button'. This will add the section to the **Allocated Order** list box.
- 7. Repeat steps 4 to 6 for all of the required sections.
- 8. If an incorrect section is added select the section in the Allocated Order list box and click on the 'left arrow button' to remove it.
- 9. Sections can be moved up and down the order within the Allocated Order list box by selecting the section to be moved and clicking on the 'Up or Down arrow buttons'.
- 10. Once all sections have been added set the angle box to the required rotation and click **OK**. This will build the truss and add it to the plan.

Creating a Custom Bar

- 1. Click Truss Builder on the General toolbar.
- 2. Click on the plan at the point you wish to add the custom truss. Select **Custom** from the Type box.
- 3. Select the shape of the custom bar.
- 4. Enter the required parameters, such as length, width and diameter.
- 5. Click **OK**. This will build the bar and add it to the plan.

Setting Bar Visibility and Height

Bars and trussing can be turned on or off and have their heights set by using the **Bar Settings** button on the layers toolbar. If a bar is turned off then it and any associated fixtures with not be displayed.



Name

Displays the user name of the bar/truss.

Visible

If checked the bar/truss is visible otherwise it is invisible.

Height

Displays the current bar height setting, in millimetres. Click on the box and enter a new value to change the bars' height.

To set the height and visibility of bars

- 1. Click Bar Settings on the layers toolbar. This will display Truss/Bar dialog listing all the available bars, along with their height and visibility.
- 2. To hide a bar click on the **tick box** in the **visible** column next to the bar's name. A tick next to a bar name will display any objects on that layer.
- 3. To set a bar's height enter the new height into the **height** column next to the bar's name.
- 4. Once all settings have been made click **OK** to close the dialog and apply the new settings. If you wish to cancel the modifications made click **Cancel**.

Copying Bars with their Fixtures

This command allows a bar or truss along with all of it's associated fixtures to be copied and added to the plan in one easy step. The function adds a copy of the original bar and all the fixtures and their details, ie Gels/Gobos to the plan.

To copy a Bar with its Fixtures

- 1. Select the bar or truss.
- 2. Right-click in the selection box.
- 3. Click **Copy with Fixtures** from the pop-up menu, this will copy the bar and it's fixtures.
- 4. Move the selection box to the new position and click.

Mirroring Fixtures on a Bar

This command allows a bar or truss along with all of it's associated fixtures to be copied and added to the plan in one easy step. The function adds a copy of the original bar and all the fixtures and their details, ie Gels/Gobos to the plan.

To mirror the Fixtures on a Bar

- 1. Select the bar or truss.
- 2. Right-click in the selection box.
- 3. Click **Mirror Fixtures** from the pop-up menu.
- 4. A warning message is now displayed indicating that fixtures may overlap one another.
- 5. Click **OK** to complete the process or **Cancel** to abandon the operation.

Duplicating Bars

This command allows the fixtures on one bar or truss to be copied to another bar. This function is useful when all the bars are in a template ie. the bars in a fly tower, and it is just required to copy the fixtures on one bar to another.

To duplicate the Fixtures on one Bar to another

- 1. Select the bar or truss.
- 2. Right-click in the selection box.
- 3. Click **Duplicate Bar** from the pop-up menu.
- 4. Select the target bar from the drop down list.
- 5. Click **OK** to complete the process or **Cancel** to abandon the operation.

Moving Fixtures from one Bar to Another

This command allows the fixtures on one bar or truss to be moved to another bar. This function is useful when all the bars are in a template ie. the bars in a fly tower, and it is just required to move the fixtures on one bar to another.

To move the Fixtures from one Bar to another

- 1. Select the bar or truss.
- 2. Right-click in the selection box.
- 3. Click **Move Fixtures** from the pop-up menu.
- 4. Select the target bar from the drop down list.
- 5. Click **OK** to complete the process or **Cancel** to abandon the operation.

Creating a Tower or Boom

Towers or booms are supported in the standard version of LxDesigner. When a bar/truss is marked as a tower/boom then the application creates both a side elevation and plan view of the tower/boom. This allows fixtures to be added at the correct heights usign the side elevation. The side elevation can be positioned any where on the as the plan view is actually used to position the tower/boom in the correct position. Fixtures added to tower/boom can only be moved up and down the length of the tower.

To create a Tower or Boom

- 1. Add a bar or truss to the plan which is the length of the tower.
- 2. Select the bar or truss.
- 3. Right-click in the selection box.
- 4. Click Properties.
- 5. Click Details.
- 6. Click on the **Type** drop down list and select **Tower**.
- 7. Enter the base height of the tower in the **Tower Base Height**
- 8. Click **OK** to save the changes or **Cancel** to abandon the operation.

This will create two symbols on the plan one will be the side elevation and the other the plan view. These can now be moved to the required positions.

Locating Bars by Name

The locate name command allows you to locate and display on the plan, bar/truss with a specified name. Bars/Truss which match the selected name are highlighted on the plan in the select colour defined on the colour page of the Drawing Setup dialog.

To Locate a Bar/Truss by Name

- 1. Right-click in free space on the plan.
- 2. Click **Locate Bar** from the pop-up menu.
- Click on the drop down list of bar names and select the required one.
- 4. Click **OK** to locate the bar/truss or **Cancel** to abandon the operation.

Working with Fixtures

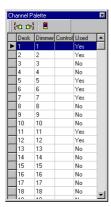
This chapter explains how to work with fixtures within LxDesigner.

Topics covered in this chapter are:

Topic	Page
Setting Channel/Dimmer Numbers	9.2
Adding and Removing Gels	9.4
Adding Gels to the Design Palette	9.6
Adding and Removing Gobos	9.7
Adding Gobos to the Design Palette	9.9
Adding and Removing Accessories	9.10
Adjusting Beam Angles	9.12
Using Focus Points	9.14
Turning Fixture Beams On or Off	9.15
Locating and Replacing Gels	9.16
Locating and Replacing Gobos	9.17
Locating and Replacing Fixtures	9.18
Locating Fixtures by Channel/Dimmer Numbers	9.19
Renumbering Fixture IDs	9.21

Setting Channel/Dimmer Numbers

A fixture's channel and dimmer numbers can be set by entering **Set Channel**. Clicking on this button will display the Channel Number palette. The current channel number is also displayed in the channel control on the fixture toolbar.



The channel number palette has a toolbar containing the following command buttons.

Command	Function
Locate Channel	Locates the selected channel within the design.
Locate Dimmer	Locates the selected dimmer within the design.
Show Phases	Locates the selected gel within the design.

On changing the channel number the dimmer number will be automatically updated to that which was specified by the patch. If more then one dimmer is patched to a channel then the drop down list will display all available dimmers for the channel. When a new design is created the patch between channels and dimmers is either set to a basic 1 to 1 patch or if a venue template is used which has a patch file associated with it, then this is used.

To set a Fixture's Channel and Dimmer Number

- 1. Click **12 Set Channel** on the **General** toolbar. This will display the channel numbering palette.
- 2. Set the required **channel** and **dimmer** numbers using the controls on the **Fixture** toolbar.
- 3. Click on the fixture to set the channel/dimmer number.
- 4. Either:

Repeat step 3 for other fixtures with the same channel/dimmer numbers.

or

Right-click to advance the channel number by one and repeat step 3

or

Repeat steps 2 and 3.

Adding and Removing Gels

Each design has a sub set the of main gel library from which gels are selected and add to the fixtures.



The gel palette has a toolbar containing the following command buttons.

Command	Function
Add Gel to Palette	Allows gels to be added from the system library.
Delete Gel from Palette	Allows the selected gel to be removed from the palette.
Locate Gel	Locates the selected gel within the design.

To add a Gel to a Fixture

- 1. Click Add Gel on the General toolbar. This will display the gel palette.
- 2. Click on the required gel in the palette.
- 3. Click on the fixture on the plan to add the gel to that fixture.
- 4. Either:

Repeat step 3 for other fixtures with the same gel.

or

Repeat steps 2 and 3 for other fixtures with a different gel.

To remove a Gel from a Fixture

- 1. Click Select on the General toolbar.
- 2. Select the fixture.
- 3. Right-click within the selection box.
- 4. Click **Properties, Display/Edit** from the pop-up menu.
- 5. Click Advance Properties.
- 6. Click Gels.
- 7. Click on the gel to be deleted in the **Selected** box
- 8. Click Remove Gel.
- 9. Click **OK** to save changes or **Cancel** to abandon the changes.
- 10. Click **OK**.

To remove all the Gels from a Fixture

- 1. Click Select on the General toolbar.
- 2. Select the fixture.
- 3. Right-click within the selection box.
- 4. Click **Properties** from the pop-up menu.
- 5. Click Remove All Gels

Adding Gels to the Design Palette

Gels are added to the design gel palette by selecting them from the main system library. Multiply selections can be made by using the **Ctrl** and **Shift** keys. The system library has a number of filters which can be used to display gels from a particular supplier and family or with a particular name or code.



To Add Gels to the Design Palette

- 1. Click Add Gel to Palette on the design palette
- 2. Select the required gels from the list. Multiple selections can be made by using the **Ctrl** and **Shift** keys.
- 3. Click **OK** to add the selection gels to the palette or **Cancel** to abandon the operation.

To Filter the Gel Library by Supplier or Family

- 1. Click on **Supplier** or **Family**. This will display a dropdown list.
- Click on the **tick box** on the left hand side to either include or remove the specified supplier/family from the displayed list. Only items with a tick next to them will be displayed.
- 3. Click on the **Supplier** or **Family** buttons to remove the drop down list and apply the filter.

To Filter the Gel Library by Name or Code

- Enter the required Code or Name in the code or name control boxes. A * can be used as a wild card.
- 2. Press **Enter** to apply the filter.

Adding and Removing Gobos

Each design has a sub set the of main gobo library from which gobos are selected and add to the fixtures.



The gobo palette has a toolbar containing the following command buttons.

Command	Function
Add Gobo to Palette	Allows gobos to be added from the system library.
Delete Gobo from Palette	Allows the selected gobo to be removed from the palette.
Locate Gobo	Locates the selected gobo within the design.

To add a Gobo to a Fixture

- 1. Click Add Gobo on the General toolbar. This will display the gobo palette.
- 2. Click on the required gobo in the palette.
- 3. Click on the fixture on the plan to add the gobo to that fixture.
- 4. Either:

Repeat step 3 for other fixtures with the same gobo.

or

Repeat steps 2 and 3 for other fixtures with a different gobo.

To remove a Gobo from a Fixture

- 1. Click Select on the General toolbar.
- 2. Select the fixture.
- 3. Right-click within the selection box.
- 4. Click **Properties, Display/Edit** from the pop-up menu.
- 5. Click Advance Properties.
- 6. Click Gobos.
- 7. Click on the gel to be deleted in the **Selected** box
- 8. Click Remove Gobo.
- 9. Click **OK** to save changes or **Cancel** to abandon the changes.
- 10. Click **OK**.

To remove all the Gobos from a Fixture

- 1. Click Select on the General toolbar.
- 2. Select the fixture.
- 3. Right-click within the selection box.
- 4. Click **Properties** from the pop-up menu.
- 5. Click Remove All Gobos

Adding Gobos to the Design Palette

Gobos are added to the design gobo palette by selecting them from the main system library. Multiply selections can be made by using the **Ctrl** and **Shift** keys. The system library has a number of filters which can be used to display gobos from a particular supplier and family or with a particular name or code.



To Add Gobos to the Design Palette

- 1. Click Add Gobo to Palette on the design palette
- 2. Select the required gobos from the list. Multiple selections can be made by using the **Ctrl** and **Shift** keys.
- 3. Click **OK** to add the selection gobos to the palette or **Cancel** to abandon the operation.

To Filter the Gobo Library by Supplier or Category

- Click on **Supplier** or **Category**. This will display a drop down list.
- 2. Click on the **tick box** on the left hand side to either include or remove the specified supplier/family from the displayed list. Only items with a tick next to them will be displayed.
- 3. Click on the **Supplier** or **Category** buttons to remove the drop down list and apply the filter.

To Filter the Gobo Library by Name or Code

- 1. Enter the required **Code** or **Name** in the code or name control boxes. A * can be used as a wild card.
- 2. Press **Enter** to apply the filter.

Adding and Removing Accessories

Fixture accessories include items such as barn doors, gobo holders, hook clamps and saftey chains. When a fixture symbol is created a set of accessories can be assigned to it which are automatically included when the fixture is added to the plan. Certain accessories are visual i.e. barn doors, these will therefore be displayed on the plan when added to a fixture. It is also possible to create a set of associated items, which can be added depending on the design. Accessories can be added or removed at any point in the design by using the advance properties dialog for the fixture. If associated items exisit for the fixture then they can be assigned or removed using the fixtures context menu.

To add or remove an Associated Item

- 1. Click Select on the General toolbar.
- 2. Select the fixture.
- 3. Right-click in the selection box.
- 4. Click **Associated Items** from the pop-up menu.
- 5. Click the required item.

If an item is checked then it has already been added to the fixture and clicking on it again will remove it from the fixture.

To add an Accessory to a Fixture

- 1. Click Select on the General toolbar.
- 2. Select the fixture.
- 3. Right-click in the selection box.
- 4. Click **Properties, Display/Edit** from the pop-up menu.
- 5. Click Advance Properties.
- 6. Click Accessories.
- Click and drag the required item from the **Available** box to the **Selected** box
- Click **OK** to add the new items or **Cancel** to abandon the changes.
- 9. Click **OK**.

To add an Accessory to a Fixture

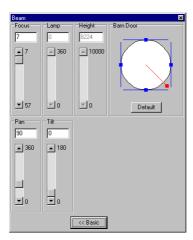
- 1. Click Select on the General toolbar.
- 2. Select the fixture.
- 3. Right-click in the selection box.
- 4. Click **Properties, Display/Edit** from the pop-up menu.
- 5. Click Advance Properties.
- 6. Click Accessories.
- 7. Click on the item to be removed in the **Selected** box.
- 8. Click **Delete**.
- 9. Click **OK** to save changes or **Cancel** to abandon the changes.
- 10. Click **OK**.

Adjusting Beam Angles

A fixture's beam angle can be set by 'Controls' which use the beam adjustment controls to adjust the beams pan/tilt and focus along with any barn door or shutter adjustment. The second method uses the mouse to position the beam on the plan. This method only allows the pan/tilt to be modified and is not available in the lite version.

Using the Beam Adjustment Controls

The beam adjustment controls allow you to position the beam of a fixture anywhere on the plan. They also provide lamp rotation for parcans and barndoor/shuttering adjustment. The barndoor/shuttering controls are only available in the lite version.



Focus

This group of controls allow the fixtures beam angle to be adjusted between its minimum and maximum focus settings. These are defined in the library data when the fixture symbol was created.

Lamp

This group of controls allow the lamp to be rotated. This group of controls is normally only enabled for fixtures which have a elliptical beam such as parcans.

Height

This group of controls allow the fixture height to be modified. This group of controls is not enabled if the fixture is assocated with a bar or truss.

Pan

This group of controls allow the fixtures pan to be modified.

Tilt

This group of controls allow the fixtures tilt to be modified.

Barn Doors/Shutters

This group of controls allow the beam to be modified as if a leaf of a barn door or shutter has been adjusted.

To adjust a Fixtures Beam by Controls

- 1. Select the fixture to be focused.
- 2. Right-click in the selection box.
- 3. Click **Adjust Beam By**, from the pop-up menu.
- 4. Click Controls.
- 5. Adjust the beam by using the slider controls.
- 6. Click on the plan to close the adjustment dialog.

To adjust a Fixtures Beam by Point

- 1. Select the fixture to be focused.
- 2. Right-click in the selection box.
- 3. Click **Adjust Beam By**, from the pop-up menu.
- 4. Click **Point**.
- 5. Move the mouse around the screen to the new location for the centre of the beam and click.

Using Focus Points

Focus points are a way of ensuring that a fixture always points to a given point on the plan. This is useful if the point at which the fixture is focused is moved then the fixtures pan and tilt will be modified to follow the point around the plan. It can also be used to add a new fixture to plan that points to the same focus point. This is achieved when a fixture which already points to the focus point is copied as the new fixture is also set to point to the focus point. This function is only available in the standard version and not the *lite* one.

To Allocate a Fixture to a Focus Point

1. Add a focus point to the plan.

Either:

- 2. Click Focus a Fixture from the General toolbar.
- 3. Click on the fixture to be focused. A line will follow the cursor from the centre of the fixture.
- 4. Click on the focus point.

or

- 2. Select the fixture to be focused.
- 3. Right-click in the selection box.
- 4. Click **Adjust Beam By**, **Point** from the pop-up menu. A line will follow the cursor from the centre of the fixture.
- 5. Click on the focus point.

Turning Fixture Beams On or Off

Fixture beams can be turned off in a number of ways. This is useful as when a large number of fixtures are added to the plan then it can become very confussing if all the beams are displayed. It is possible to either turn all fixture beams on or off or just an individual fixture's beam on or off. It is also possible to prevent beams from being displayed by turning the Beam Angles layer off.

To turn all Fixture Beams On

Either.

- 1. Click Turn All Beams On on the Fixture toolbar.
- 1. Right-click on the plan in free space.
- 2. Click **Fixture Beams**, **All On** from the pop-up menu.

To turn all Fixture Beams Off

Either:

- Click Turn All Beams Off on the Fixture toolbar.
- 1. Right-click on the plan in free space.
- 2. Click **Fixture Beams**, **All Off** from the pop-up menu.

To turn a single Fixtures Beam On or Off

- 1. Click **Set Beam On/Off** on the **General** toolbar.
- 2. Click on a fixture to toggle the beam between on and off.
- 3. Repeat step 2 for all required fixtures.

Locating and Replacing Gels

The locate gel command allows you to locate and display on the plan, fixtures containing a specified gel. The replace gel command allows you to replace gels used within the design with an alternative. This can be done on a complete design basis or only for the currently selected fixtures.

To Locate a Gel

- 1. Click **Find Gel** from the **Search** menu.
- 2. Select the gel to be located in the **Find What** box.
- 3. Click **OK** to locate the selected gel. If any fixtures contain the selected gel then they will be redrawn in the location colour.

To Replace a Gel in the Complete Design

- 1. Click **Replace Gels** from the **Search** menu.
- 2. Select the gel to be replaced in the **Find What** box.
- 3. Select the gel to be used as the replacement in the **Replace** with box.
- 4. Click **OK** to replace the gel or **Cancel** to abandon the changes.

To Replace a Gel in the Current Selection

- 1. Select the required fixtures.
- 2. Click **Replace Gels** from the **Search** menu.
- 3. Select the gel to be replaced in the **Find What** box.
- 4. Select the gel to be used as the replacement in the **Replace** with box.
- 5. Click Current Selection in the Replace Options box.
- 6. Click **OK** to replace the gel or **Cancel** to abandon the changes.

Locating and Replacing Gobos

The locate gobo command allows you to locate and display on the plan, fixtures containing a specified gobo. The replace gobo command allows you to replace gobos used within the design with an alternative. This can be done on a complete design basis or only for the currently selected fixtures.

To Locate a Gobo

- 1. Click **Find Gobo** from the **Search** menu.
- 2. Select the gobo to be located in the **Find What** box.
- 3. Click **OK** to locate the selected gobo. If any fixtures contain the selected gobo then they will be redrawn in the location colour.

To Replace a Gobo in the Complete Design

- 1. Click **Replace Gobos** from the **Search** menu.
- 2. Select the gobo to be replaced in the **Find What** box.
- Select the gobo to be used as the replacement in the Replace with box.
- 4. Click **OK** to replace the gobo or **Cancel** to abandon the changes.

To Replace a Gobo in the Current Selection

- 1. Select the required fixtures.
- 2. Click **Replace Gobos** from the **Search** menu.
- 3. Select the gobo to be replaced in the **Find What** box.
- Select the gobo to be used as the replacement in the Replace with box.
- 5. Click Current Selection in the Replace Options box.
- 6. Click **OK** to replace the gobo or **Cancel** to abandon the changes.

Locating and Replacing Fixtures

The locate fixture command allows you to locate and display on the plan, fixtures of a specified type. The replace fixture command allows you to replace fixtures of one type used within the design with an alternative. This can be done on a complete design basis or only for the currently selected fixtures.

To Locate a Fixture

- 1. Click **Find Fixture** from the **Search** menu.
- 2. Select the gobo to be located in the **Used Fixtures** box.
- 3. Click **OK** to locate the selected fixture. If any fixtures match the selected type then they will be redrawn in the location colour.

To Replace a Fixture in the Complete Design

- 1. Click **Replace Fixtures** from the **Search** menu.
- Select the fixture type to be replaced in the **Used Fixtures** box
- 3. Select the fixture type to be used as the replacement in the **Available Fixtures** box.
- 4. Click **OK** to replace the fixture or **Cancel** to abandon the changes.

To Replace a Fixture in the Current Selection

- 1. Select the required fixtures.
- 2. Click **Replace Fixtures** from the **Search** menu.
- Select the fixture type to be replaced in the **Used Fixtures** box
- 4. Select the fixture type to be used as the replacement in the **Available Fixtures** box.
- 5. Click Current Selection in the Replace Options box.
- 6. Click **OK** to replace the fixture type or **Cancel** to abandon the changes.

Locating Fixtures by Channel/Dimmer Numbers

The locate channel or dimmer command allows you to locate and display on the plan, fixtures with a specified channel or dimmer number. Fixtures which match the entered channel or dimmer number are highlighted on the plan in the select colour defined on the colour page of the Drawing Setup dialog.

To Locate a Fixture by Channel Number

Either:

- 5. Right-click in free space on the plan.
- 6. Click **Locate Lantern** from the pop-up menu.
- 7. Click By Channel.
- 8. Enter the required channel number in the text box.
- 9. Click **OK** to locate the fixtures or **Cancel** to abandon the operation.

or

- 1. Click **12 Set Channel** on the **General** toolbar. This will display the channel numbering palette.
- 2. Click Locate Channel.
- 3. Click on the channel number to be located.
- 4. Repeat step 3 for other channel numbers or click to exit locate mode.

To Locate a Fixture by Dimmer Number

Either:

- 1. Right-click in free space on the plan.
- 2. Click **Locate Lantern** from the pop-up menu.
- 3. Click **By Dimmer**.
- 4. Enter the required dimmer number in the text box.
- 5. Click **OK** to locate the fixtures or **Cancel** to abandon the operation.

or

- 1. Click **12 Set Channel** on the **General** toolbar. This will display the channel numbering palette.
- 2. Click on the dimmer number to be located.
- 3. Click Locate Dimmer.
- 4. Repeat step 3 for other channel numbers or click to exit locate mode.

Plugging Up Fixtures

Fixtures can be plugged up to any outlet symbol that has been added to the plan. An outlet can either represent a fixed channel outlet or a cable run. If a fixture is plugged up to an outlet that represents a dimmer then it will be assigned that dimmer number and its associated channel number. However if the outlet represents a cable run the outlet identification will be added to the fixture.

To Plug Up a Fixture

- 1. Click Plug Up on the General toolbar.
- 2. Click on the fixture to be plugged up. A line will follow the mouse from the centre of the fixture.
- 3. Click on the required outlet.

To Disconnect a Fixture from an Outlet

- 1. Click Select on the General toolbar.
- 2. Select the fixture to be disconnected.
- 3. Right-click within the selection rectangle.
- 4. Select **Cable**, **Disconnect** from the pop-up menu.

Renumbering Fixture IDs

Every fixture has a unique unit ID which is allocated when it is added to the plan. It is offer useful to change these ID such that they count from top to bottom either within the drawing or along a bar. Fixture Ids can not be directly edited but one of the functions provide must be used to change the IDs.

To Renumber Fixture IDs within the Drawing

- 1. Click **Renumber Fixtures** from the **Format** menu.
- 2. Either:

Click **Top to Bottom** to renumber the fixtures on the plan from top left to bottom right.

or

Click **Bottom to Top** to renumber the fixtures on the plan from bottom right to top left.

3. Enter the value required for the first fixture and click **OK**.

To Renumber Fixture IDs along a Bar

- 1. Select the bar on which the fixtures are rigged.
- 2. Right-click in the selection box.
- 3. Click **Renumber Fixtures** from the pop-up menu.
- 4 Fither

Click **Left to Right** to renumber the fixtures on the bar from left to right

or

Click **Right to Left** to renumber the fixtures on the bar from right to left.

01

Click **Top to Bottom** to renumber the fixture on the bar from top to bottom.

or

Click **Bottom to Top** to renumber the fixtures on the bar from bottom to top.

5. Enter the value required for the first fixture and click **OK**.

To Renumber Fixture IDs within a Group

- 1. Drag a selection box around the required fixtures.
- 2. Right-click in the selection box.
- 3. Click **Renumber Fixtures** from the pop-up menu.
- 4. Either:

Click **Left to Right** to renumber the fixture on the bar from left to right

or

Click **Right to Left** to renumber the fixtures on the bar from right to left.

or

Click **Top to Bottom** to renumber the fixture on the bar from top to bottom.

or

Click **Bottom to Top** to renumber the fixtures on the bar from bottom to top.

5. Enter the value required for the first fixture and click **OK**.

Reports

This chapter explains the reports available within LxDesigner. Topics covered in this chapter are:

Topic	Page
Overview	10.2
User Reports	10.4
Customizing Reports	10.5
Short Form Reports	10.6

Overview

When a report is run it is displayed in a new window. Once run it is disabled within the reports menu and is added to the Windows menu. If the report window is closed by clicking on the close window icon or selecting close from the file menu of the report window the report option in this menu is enabled. If the plan is modified while a report window is open, the report will be automatically updated when that window is next selected. It is possible to select any area of a report by using the mouse and then to copy this to the clipboard by typing control C. This will able the copied data to be imported into another application such as Excel or Word. There is also the ability to save the report as an Excel or Word document if these applications exist on the host machine.

Used Channel Report

The used channel report displays a table based on channel numbers of their associated dimmer numbers, cable Ids and channel use. Clicking on a channel number will cause the corresponding fixtures on the plan to be displayed in the locate colour.

Unused Equipment

The used equipment report displays a list of all the equipment used within the design including all associated accessories and gobos. For each item the quantity required, available stock and hire costs are given.

Gel Call

The gel call report will scan all of the generic fixtures and colour changes within the design to generate a gel call table. This table consists of a grid of gels along the horizontal axis and fixtures down the vertical axis. The number of fixtures using each gel is then place in the grid.

Fixture Details

The fixture details report will list all of the fixtures within the design along with their associated truss/bar, gels, gobos and channel numbers. Clicking on a fixture will cause the corresponding fixture on the plan to be displayed in the locate colour.

Rigging Call

The rigging call report will list all of the fixtures associated with each bar/truss with in the design. Clicking on a truss/bar name will cause the corresponding truss/bar on the plan to be displayed in the locate colour.

Rigging Distances

The rigging distances report will generate a list of each bar/truss and its associated fixtures with their distances from the centre of the bar/truss. Clicking on a truss/bar name will cause the corresponding truss/bar on the plan to be displayed in the locate colour.

Channel Loading

The channel loading report will calculate the load on each channel and display the results in a table. Clicking on a channel number will cause the corresponding fixtures on the plan to be displayed in the locate colour.

Rack Loading

The rack loading report will calculate the loading on each rack within the design. For this report to function then rack symbols must have been added to the design and their base channel specified.

Phase Loading

The phase loading report will calculate the loading on each phase within the design. For this report to function then rack symbols must have been added to the design and their phase parameter specified.

Plug Up Report

The plug up report will display a table of dimmer numbers, channel numbers and their associated cable Ids.

Focus Report

The focus report is very similar to the fixture report but contains fewer columns of data.

Selections Report

The selections report is a special report which lists all of the fixtures within each defined selection. For each selection it gives the channel number, dimmer number and use fields of all the fixtures which are contained within the selection.

User Reports

User reports are based on the standard reports outlined in the above sections. It is possible to save the configuration of any report into a new user report, which can be run. This removes the need to have to customize a standard report each time that it is run.

Customizing Reports

You can customize any standard report in a number of ways.

- 1. Clicking on the header can change the column, which the report is sorted on. The column, which the report is sorted on, displays a triangle. This triangle indicates where the sort is up or down depending on the direction of the triangle.
- 2. Columns can be turned on or off. Right mouse clicking on the report will display a menu of column names. Selecting a column name will turn that column on or off.
- 3. Columns can be moved. To move a column, click on the column header and drag it into the new position.

If you change the layout of a report it will only be retained if you save the new layout as either a user defined report or as the report default.

Short Form Reports

Short form reports provide useful information in a form which can be viewed during the design process. A short form report is continously updated during the design and can be docked on the right hand side of the application for easy reference.

Used Fixtures Short Form

The used fixtures short form gives a continous report on the type and quantity of fixtures used within the design.



This short report has a toolbar containing the following command buttons.

Command	Function
Specify Stock File	Allows the stock file to be specified.
Edit Stock File	Edits the current stock file.
Highlight Shortage	Highlights the shortages between used and available equipment.

Printing, Importing and Exporting

This chapter explains how to print or export the plan and how to import a ground plan for use in LxDesigner.

Topics covered in this chapter are:

Topic	Page
Printing the Plan	11.2
Saving and Using Selections	11.7
Importing a DXF file	11.8
Exporting a Plan	11.11
Creating A Venue Template	11.12
Creating a Venue/User Library	11.12

Printing the Plan

The plan can be printed to any standard windows supported printed at any point in the design. When the plan is printed the scale, orientation and page setup are defined on the **Print Setup** dialog.



Printer

Click in this drop-down box to specify the printer to be used.

Paper

This group of controls set the paper and scaling used to print the plan.

Size

Click in this drop-down box to specify the paper size to be used.

Scale

Click in this drop-down box to specify the scale to be used.

Fit To Page

If checked then the scale will automatically be set to ensure that the plan will fit on 1 sheet of the paper set in the size box.

Orientation

This group of buttons allow the orientation of the paper to be specified.

Mode

This group of buttons specified where the complete plan or current view is printed.

Options

This group of controls define the printing options.

Draw Outline

If checked an outline is drawn around the plan as defined by the floor area dimensions for the design.

Centre On Page

If checked the plan will be centred on the paper.

Page Layout

This image shows the number of pages required to print the plan with the current settings. The red box represents the plan outline based on the floor area dimensions and the black dotted lines represent the printed pages.

To print to a local or networked printer

- 1. Ensure that the required printer driver has been installed and the printer added to the list of available printers.
- 2. Click **Print Plan** from the **File** menu.
- 3. Set the required printing parameters on the Print Setup dialog.
- 4. Click on **OK** to proceed or **Cancel** to abandon the operation.
- 5. Click on **OK** to print the plan or **Cancel** to abandon the operation.

Using a print bureau.

It is possible to use any printer, which is supported by Windows to print out a plan designed using LxDesigner. However as most printers are A4 and at best A3, for large plans it can mean splitting the plan across a number of pages and sticking them together. This may be OK but is not ideal for large plans. The following details how it is possible to output the design for printing by a print bureau on to any size of paper.

There are three methods, the second or third one is strongly recommended by LxDesigns as the way to obtain the best results at the lowest cost.

To use a Print Bureau via DXF

- 1. Click **Export** from the **File** menu. This will display the standard Windows file save dialog.
- 2. Select **AutoCAD** Files in the Save as type control.
- 3. Enter the required filename
- 4. Click on Save.

This will produce a DXF file, which can be read by other CAD programs used by printing bureaus. However some programs may not be able to read the file as there are different requirements between applications which read these files and the printing bureau may not be able to open it. If they can read the file then they will be able to print it out to a specified scale using the third party CAD program.

To Use a Print Bureau via HPGL

This method uses the in built printing capability of LxDesigner to print the design at the required scale to any Windows supported printer - but saving it to a file for the print bureau to send to their plotter.

- 1. It will be necessary to add a plotter to the list of available printers on your machine. We recommended that you add HP 7586B as this supports paper sizes up to A0. To do this, use the 'Add Printer' option from the Windows Printers folder.
- 2. Click **Print Plan** on the **File** menu
- 3. Click on the **Printer** drop-down list and select the HP 7586B printer.
- 4. Set the required printing parameters.
- 5. Click on **OK** to proceed or **Cancel** to abandon the operation.
- 6. Click Print to File.
- 7. Click on **OK** to proceed or **Cancel** to abandon the operation.
- 8. Enter the required filename.
- 9. Click **OK** to print to file or **Cancel** to adandon the operation.

This will produce a HPGL file, which the printing bureau will be able to send directly to their plotters hence removing the need to use a third party package and reducing the cost.

To use a Print Bureau via disk file

This method is similar to method 2 except it can be any printer or plotter which a Windows driver can be obtained for. These are usually found and download from the printer manufactures' web site and should match the printer being used by the bureau.

- 1. It will be necessary to install and add the printer to the list of available printers on your machine.
- 2. Click **Print Plan** on the **File** menu
- 3. Click on the **Printer** drop-down list and select the required printer.
- 4. Set the required printing parameters.
- 5. Click on **OK** to proceed or **Cancel** to abandon the operation.
- 6. Click Print to File.
- 7. Click on **OK** to proceed or **Cancel** to abandon the operation.
- 8. Enter the required filename.
- 9. Click **OK** to print to file or **Cancel** to adandon the operation.

This will produce a '.prn' file, which the printing bureau will be able to send directly to the printer hence removing the need to use a third party package and reducing the cost.

Saving and Using Selections

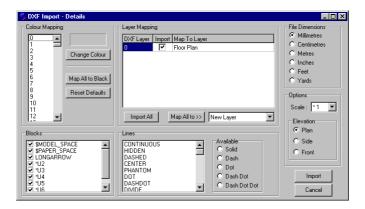
It is possible to save the currently selected group of objects for recall and use at a later time in the design. This is useful if you require to change or move a common group of objects. For example it could be used to change a group of fixtures from one type to another with out affecting the complete design. To save the selection:

- 1. Select the objects that will make up the new selection.
- 2. Click on the 'Selection List' button on the 'Layers' toolbar, this will display the Selections window.
- 3. Click on the yellow 'Move' control, drag and drop it over the list of available selections on the 'Selections' window. This will cause a new selection to be created and added o the list.
- 4. To change the name click on the new selection, type in the new name in the edit control at the top of the window and click 'Rename'.

Once a selection has been added to the Selection List it can be recalled by the clicking on its name within the list. The Selection list is saved along with the design.

Importing a DXF file

It is possible to import a DXF file which has been generated by another drawing package such as AutoCAD. This is useful as it allows the import of exisiting venue outlines and set drawings directly into LxDesigner, which can then have the necessary rigging and fixtures added. The import of the DXF file is controlled by the **DXF Import** dialog.



Colour Mapping

This group of controls allow the mapping between colour numbers used in the DXF file and real colour values. The default mapping is to use the standard AutoCAD colour translation table.

Change Colour

Click on this button to display the standard windows colour dialog to select a new colour for the selected colournumber in the list box.

Map All to Black

Click on this button to set all import colours to black.

Reset Defaults

Click on this button to set the import colours to th AutoCAD default colour translation values.

Blocks

This group of controls determine if the blocks defined in the DXF file are used or the blocks are remapped to LxDesigner symbols. The default mapping is to use the blocks as defined in the DXF file.

Layer Mapping

This group of controls allow the mapping between layers used in the DXF file and layers available in LxDesigner. The default mapping is that all entities in the DXF file are mapped to the Floor Plan layer.

Import All

Click on this control to cause all layers to be imported from the DXF file. This will cause new layers to be created.

Map All >>

Click on this control to cause all DXF layers to be mapped to the one displayed in the drop-down list. Click on the drop-down list of layers to select the one to use.

Lines

This group of controls allow the mapping between line types used in the DXF file and line types available in LxDesigner. The default mapping is that all lines will be solid.

File Dimensions

This group of buttons determines what units are used during the import of the DXF file. As DXF files do not contain an indication of the base units used when the drawing was created then you will need to experiment with this group of controls to obtain the current results.

Options

This group of controls specify the import options.

Scale

This control functions in a similar wayto the File Dimensions buttons to determine the current import scaling.

Elevations

Thos group of buttons determine if the imported DXF file is a plan view or if it should be rotated to form a side or front elevation.

To Import a DXF file

- 1. Click **Import Drawing** from the **File** menu.
- 2. Click **DXF Format**.
- 3. Using the standard windows file open dialog locate and select the file to be imported.
- 4. Click **Open** to proceed or **Cancel** to abandon the command.
- 5. Set the required import options on the DXF Import dialog.
- 6. Click **Import** to import the DXF file or **Cancel** to abandon the command.

Exporting a Plan

It is possible to export the plan into one of several formats for importing into other drawing packages such as AutoCAD. This is useful to allow designs to be printed out or edited by third parties.

To Export the plan

- 1. Click **Export** from the **File** menu. This will display the standard Windows file save dialog.
- 2. In the **Save as type** contol *either*:

Select **AutoCAD Files** to export the plan as a DXF file

Select **Bitmap Files** to export the plan as a bitmap image or

Select **Meta Files** to export the plan as a Windows Meta File

Select **Enhanced Meta Files** to export the plan as a Windows Enhanced Meta file

- 3. Enter the required filename
- 4. Click on Save.

Creating A Venue Template

A template is an outline of the floor area of a venue. It can also include fixed bars that are always present. A template always the default information for a venue to be used time and again with out the need to re enter the information.

To create a Venue Template

- 1. Click **New** from the **File** menu.
- 2. Enter a name for the new design
- 3. Click OK.
- 4. Select **Normal** as the Template name.
- 5. Click OK.
- 6. Enter the maximum floor area and height for the new template.
- 7. Add the necessary primitives and bars/trusses to the plan.
- 8. Click **Save As Template** from the **File** menu.
- 9. Enter the name of the template
- 10. Click Save.

Creating a Venue/User Library

A Venue/User Library is a collection of symbols that you wish to use in a design or are available at a particular venue. Venue/User Libraries are created using the Stock/Costs Editor.

File and Design Management

This chapter explains how to manage files and designs options within LxDesigner.

Topics covered in this chapter are:

Topic	Page
File Management	12.2
Project Details	12.5
Automatic Backups	12.4
Dimmer to Channel Patching	12.11

File Management

File management is consists of a number of commands all of which are locate under the file menu option of the main menu. When creating a new design, opening or deleting an existing one or backing a design up the **Design Selection** dialog is displayed. If a design is backed up or restored then the backup path specified on the Drawing Setup dialog is used.



To Create a New Design

- 1. Click **New** on the **File** menu.
- 2. Enter the new designs name in the text box at the top of the dialog.
- 3. Click New.

To Open an Existing Design

Either:

- 1. Click **Open** on the **File** menu
- 2. Select the required design name from the list of available designs.
- 3. Click Open.

or

- 1. Click **Reopen** on the **File** menu.
- 2. Click the required name in the list of recently opened designs.

To Save changes to the current Design

1. Click **Save** on the **File** menu.

To Save the current Design under a New Name

- 1. Click **Save As** on the **File** menu.
- 2. Enter the new designs name in the top text box
- 3. Click Save As.

To Close the current Design

- 1. Click Close on the File menu.
- 2. If the design has been modified since the save then

Click **Yes** to save the changes and close the design.

or

Either:

Click **No** to close the design without saving the changes.

or

Click **Cancel** to abandon the command.

To Delete an Existing Design

- 1. Click **Delete Design** on the **File** menu, .
- 2. Select the required name from the list of available designs.
- 3. Click Delete.
- 4. Click **Yes** to delete the design or **No** to abandon the command.

To Backup an Existing Design

- 1. Click **Backup** on the **File** menu.
- 2. Select the required name from the list of available designs.
- 3. Click Backup.

To Restore a Design

- 1. Click **Restore** on the **File** menu.
- 2. Select the required name from the list of available designs.
- 3. Click Restore.

Automatic Backups

Automatic backups can be used to allow regular backups to be made during the design process. This is useful if the computer crashes as it allows the last bakup to be restored, hence all work on a design is not lost

To Enable or Disable Automatic Backups

- 1. Click **Automatic Backups** on the **File** menu.
- 2. Click **Enabled**. If a check mark is displayed next to enabled then backups are enabled otherwise they are disabled.

To Set the Automatic Backup Interval

- 1. Click Automatic Backups on the File menu.
- 2. Click Set Interval.
- 3. Enter the new backup interval, in minutes, in the text box.
- Click **OK** to set the new interval or **Cancel** to abandon the command.

To Restore the last Automatic Backup

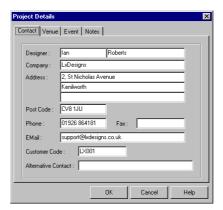
- 1. Click **Automatic Backups** on the **File** menu.
- 2. Click Restore Last Backup.

Project Details

The **Project Details** dialog allows the details of the project to be setup. It consists of a number of sheets which are detailed below. The contact sheet is held globally so it only has to be set up once. These details are then used by title box primitives to design the information.

Contact Properties Sheet

This sheet allows contact information to be specified. This is normally used to enter your personal details.



Designer

Click on these two text boxes to enter the lighting designers name. This field is used by the lighting designer field of the title box primitive and is written to the HirePoint required equipment export file.

Company

Click on this text box to enter your company's name. This field is written to the HirePoint required equipment export file.

Address and Post Code

Click on these text boxes to enter your company's address. This field is written to the HirePoint required equipment export file.

Phone

Click on this text box to enter your company's telephone number. This field is written to the HirePoint required equipment export file.

Fax

Click on this text box to enter your company's fax number. This field is written to the HirePoint required equipment export file.

Email

Click on this text box to enter your company's email address. This field is written to the HirePoint required equipment export file.

Customer Code

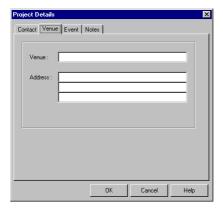
Click on this text box to enter your company's fax number. This field is written to the HirePoint required equipment export file.

Alternate Contact

Click on this text box to enter your company's fax number. This field is written to the HirePoint required equipment export file.

Venue Properties Sheet

This sheet allows venue specific information relating to the design to be specified.



Venue

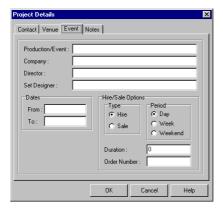
Click on the text box to enter the venue name. This field is used by the venue field of the title box primitive.

Address

Click on the text boxes to enter the venues address. This field is reserved for future use.

Event Properties Sheet

This sheet allows event specific information relating to the design to be specified.



Production/Event

Click on this text box to enter the production or event name. This field is used by the event field of the title box primitive.

Company

Click on this text box to enter the production company name. This field is used by the company field of the title box primitive.

Director

Click on this text box to enter the director's name. This field is used by the director field of the title box primitive.

Set Designer

Click on this text box to enter the set designer's name. This field is used by the set designer field of the title box primitive.

Dates

This group of controls provides a means of entering the production dates. These fields are used by the production dates of the title box primitive.

From

Click on this text box to enter the production starting date.

To

Click on this text box to enter the production ending date.

Hire/Sale Options

This group of controls provides a means of selecting the hire period or sales options which are then used by the used equipment report.

Туре

This group of buttons allow whether the design is hire or sale.

Period

This group of buttons allow the hire period to be specified.

Duration

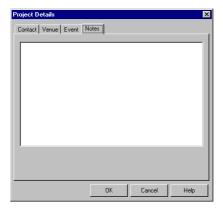
Click on this text box to enter the hire duration.

Order Number

Click on this text box to enter the order number.

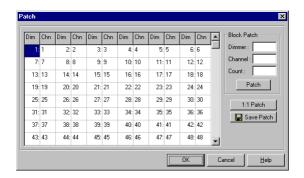
Notes Properties Sheet

This sheet allows specific design notes to be specified. Thise field is written to the HirePoint required equipment export file.



Dimmer to Channel Patching

The patch is modified can be modified in one of two ways. Either the basic patch editor dialog can be used or the Graphical Patch Editor.



The basic patch dialog, shown above, consists of a grid of dimmer and channel numbers and a number of controls.

Block Patch

This group of controls allows a block of channels to be patched in one operation.

Dimmer

Specifies the starting dimmer number for a block patch.

Channel

Specifies the starting channel number for a block patch.

Count

Specifies the number of dimmers to be patched for a block patch.

Patch

Clicking on this button will patch the dimmers and channels as defined in the controls detailed above.

1:1 Patch

Clicking on this button changes the patch to a 1:1 configuration.

Save Patch

Clicking on this button saves the current patch information.

To change the patch of a single dimmer

- 1. Click on the channel number next to the required dimmer
- 2. Enter the new value.
- 3. Press Enter or move to the next dimmer to be changed.

To change the patch of a block of dimmers

- 1. Enter the first dimmer number into the **Dimmer** control.
- 2. Enter the first channel number into the **Channel** control.
- 3. Enter the number of dimmers to patch into the **Count** control
- 4. Click Patch.

Configuration Options

This chapter explains how to change the general and drawing configuration options of the application. The configuration screens are available from the Tools option on the main menu.

Topics covered in this chapter are:

Topic	Page
General Properties Sheet	13.2
General Colour Properties Sheet	13.4
Fixture Colour Properties Sheet	13.5
Truss/Bar Colour Properties Sheet	13.7
Cables Colour Properties Sheet	13.8
Grid Properties	13.9
Floor Area Properties Sheet	13.10
Common Attributes Properties Sheet	13.11
Block Attributes Properties	13.12
Split Attributes Properties Sheet	13.13
Rigging Attributes Properties Sheet	13.14
Cable Attributes Properties Sheet	13.16
File Locations Properties Sheet	13.17
Layers Properties Sheet	13.18
3D Options Properties Sheet	13.19

General Properties Sheet

This sheet allows general parameters for the application to be specified.



Delete Verification

This control turns on and off the delete verification requester. If checked a confirmation requester is displayed each time an object is deleted.

Undo/Redo Enable

This control turns on and off the undo/redo option. If checked undo/redo is enabled.

Default Dock Mode

This group of controls determine if palettes, libraries and short reports are docked or not when opened. If the option is checked then the palette, library or report will automatically be docked on the right hand side of the desk top when opened.

Maximums

This group of controls allows the maximum number of channels, dimmers and independents to be specified. These are reserved for future

Values

This group of controls is only enabled if the LxActive add-in has been enabled. It specifies where DMX values are displayed as percentages or true DMX codes.

Tower Elevations

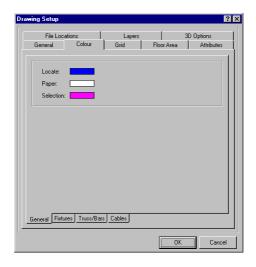
This group of controls determine how tower/boom elevations are displayed. It allows elevations of towers and booms to be created automatically and which symbols to use on the elevation view. These elevations are added to the plan view.

Reports

This group of controls specify global report options.

General Colour Properties Sheet

This page allows the colours used for general settings and to draw fixtures, rigging and cabling to be specified.



Locate

Specifies the colour used by the locate commands to render the located objects.

Paper

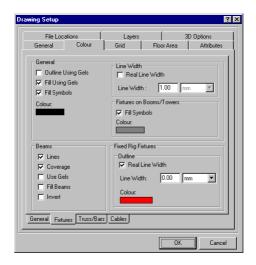
Specifies the colour used for the drawing sheet.

Selection

Specifies the outline colour for objects in the current selection.

Fixture Colour Properties Sheet

This sheet allows the colours used to draw the fixtures to be specified.



General

This group of controls specify the general options for drawing fixtures.

Outline Using Gels

If checked fixtures that have a gel assigned to them will have there outline rendered using the gel colour.

Fill Using Gels

If checked fixtures that have a gel assigned to them will be filled using the gel colour.

Fill Symbols

If checked the fixture symbols will be filled with the colour specified by the colour control.

Colour

Clicking on this control with display the standard colour dialog from where the fill colour for the fixtures can be chosen.

Real Line Width

If checked then the pen width to draw the outline of fixtures is specified in real units otherwise it is in screen pixels.

Line Width

Specifies the line width used to draw fixtures.

Fixtures on Booms/Towers

This group of controls allows the colour and fill of fixtures which are on booms and towers to be specified. This only applies to the duplicate symbols which are on the plan view of the tower.

Fill Symbols

If checked the fixture symbols on the plan view will be filled with the colour specified by the colour control.

Colour

Clicking on this control with display the standard colour dialog from where the fill colour for the plan view symbols can be chosen.

Fixed Rig Fixtures

This group of controls allows the colour and line width of fixtures marked as fixed rig to be specified.

Real Line Width

If checked then the pen width to draw the outline of fixed fixtures is specified in real units otherwise it is in screen pixels.

Line Width

Specifies the line width used to draw fixed fixtures.

Outline Colour

Specifies the colour used to draw fixed fixtures.

Beams

This group of controls allows the rendering of beam angles to be specified.

Lines

If checked straight lines defining the four extreme points of the beam's coverage will be drawn.

Coverage

If checked the actual coverage of the beam will be drawn.

Use Gels

If checked fixtures that have a gel assigned to them will have their beam's rendered using the gel colour.

Fill Beams

If checked the fixture symbols will be filled

Invert

If checked the beams colour will be inverted.

Truss/Bar Colour Properties Sheet

This sheet allows the colours used to draw the rigging to be specified.



Use Symbols Colour

This allows the colour, which the bar/truss was originally drawn in when it was defined, to be used.

Fill Symbols

This allows the fixture symbol to be filled.

Colour

This is the default bar/truss colour if Use Symbol Colour is not selected.

Cables Colour Properties Sheet

This sheet allows the colours used to draw the cabling to be specified.

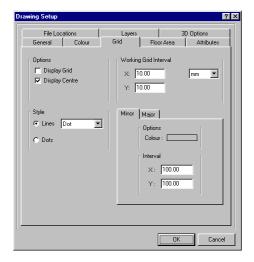


Colour

This control allows the colour used to render cables to be specified.

Grid Properties Sheet

This sheet allows the various grids to be specified.



Style

Clicking on one of these two buttons sets the grid style to either:

Lines in which the grid is drawn as a series of vertical and horizontal lines.

Or

Dotes in which the grid is drawn as a series of dots.

Minor/Major Tabs

This group of controls allows the grid, which is displayed on the screen to be set. It is possible to set both a major and minor grid that allows two grid overlays to be defined. For example ever 10th grid interval could be highlighted as on normal graph paper.

Working Grid Interval

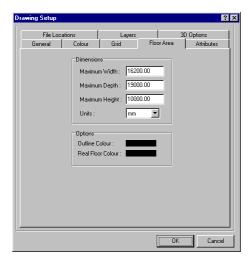
This group of controls allows the grid, which is used when adding or moving objects to be set. All entities, which are added to the plan, will snap to the working grid if snap to grid mode is selected.

Options

This group of controls set the display options for the grid.

Floor Area Properties Sheet

This sheet allows the maximum floor area and height of the design to be specified.



Dimensions

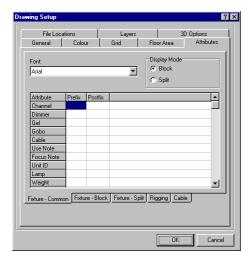
This group of controls allows the dimensions of the design cube to be specified. All designs are done inside a cube with dimensions set by these controls, which are normally set to the maximum floor area, and height of the venue being used for the design.

Options

This group of controls allows the colour used for the design cube outline and the real floor colour.

Common Attributes Properties Sheet

This sheet allows the way in which attributes associated with fixtures in either block or split mode are displayed on the plan.



Font

Sets the font used in block mode.

Display Mode

Clicking on one of these two buttons sets the attribute display mode for fixtures to either:

Block in which the attributes are displayed on after another in a vertical block.

Or

Split in which the attributes are split and positioned around the fixtures as defined by the Fixture – Spit attributes sheet.

Attributes

This grid allows prefix and postfix strings to be defined.

Prefix

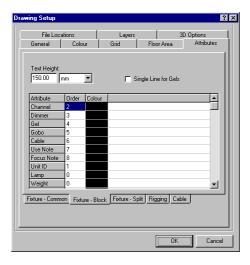
This column allows a prefix for fixture parameters to be specified. Each parameter can have a different prefix, which helps it to be identified on the plan.

Postfix

This column allows a postfix for fixture parameters to be specified. Each parameter can have a different postfix, which helps it to be identified on the plan.

Block Attributes Properties Sheet

This sheet allows the way in which attributes associated with fixtures in block mode are displayed on the plan.



Text Height

Sets the height of the text used in block mode.

Single Line Gels

If checked fixtures' with multiple gels will have them displayed on a single line.

Attributes

This grid allows the order and colour used for drawing attributes in block mode.

Order

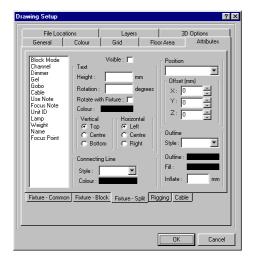
This column allows the drawing order of the attributes to be specified. The first attribute will have a 1 in this column.

Colour

This column allows the colour used to draw the attribute in block mode to be specified.

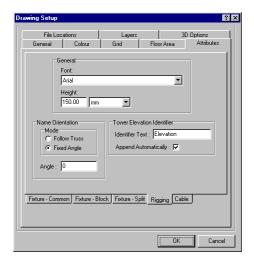
Split Attributes Properties Sheet

This sheet allows the way in which attributes associated with fixtures in split mode are displayed on the plan.



Rigging Attributes Properties Sheet

This sheet allows the way in which attributes associated with rigging (bars and truss) are displayed on the plan.



General

This group of controls specify the general style used for trussing and bars related text.

Font

Sets the font used for trussing related text.

Text Height

Sets the height of the text used for trussing related text.

Name Orientation

This group of controls specify the orientation for the user name on bars and trusses.

Mode

Clicking on one of these two buttons sets the user name orientation to either.

Follow Truss in which the name will have the same orientation as its parent trussing.

Or

Fixed Angle in which the user name orientation is specified by the Angle control

Angle

Sets the user name orientation in Fixed Angle mode.

Tower Elevation Identifier

This group of controls specify the identifier appended to the user name for tower or boom elevations.

Identifier Text

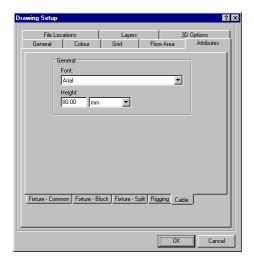
Sets the identifier text appended to user names.

Append Automatically

If ticked the identiifier text is automatically appended to the tower/booms user name when the elevation is created.

Cable Attributes Properties Sheet

This sheet allows the way in which attributes associated with cable (cable runs and outlets) are displayed on the plan.



General

This group of controls specify the general style used for cabling and outlet related text.

Font

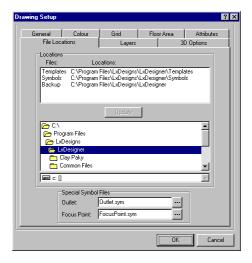
Sets the font used for cabling related text.

Text Height

Sets the height of the text used for cabling related text.

File Locations Properties Sheet

This sheet allows the location of the various file groups and common files used by LxDesigner be specified.



Locations

This is useful if the libraries are installed on a central machine that is accessed over a network.

To change the location of a group of files

- 1. Click on the group of files to be relocated.
- 2. Select the new **drive** and **folder** for the group.
- 3. Click Update

Special Symbol Files

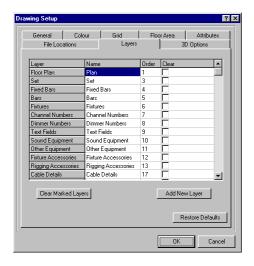
This group of controls allows the special symbols used for outlets and focus points to be specified.

To change the special symbol files

- 1. Click the **3 dot** button next the symbol to change.
- 2. Using the standard open file dialog locate the required file.
- 3. Click Open.

Layers Properties Sheet

This sheet allows the order in which layers are drawn to be specified.



Add New Layer

When clicked a new design layer is appended to the end of the layer list.

Clear Marked Layers

When clicked this button executes a command to delete all entities on the layers which have a tick mark in their clear column.

Restore Defaults

When clicked this button restores the system default values for the name and order settings.

Layers

This grid allows the nam and order of the layers to be defined.

Name

This column allows a user name to be defined for each layer. These names are then used within the design in place of the system ones.

Order

This column allows the drawing order of each layer to be specified. The layers are drawn depending on the value in the this column starting with all those layers specified with an order value of 1.

Clear

This column works in conjunction with the Clear Marked Layers button.

3D Options Properties Sheet

This sheet is only displayed if the elevations or perspective add-ins have been purchased. It allows options relating to how symbols, beams and walls are displayed in side, front or perspective views.



Use 3D Symbols for

This group of controls specifies which symbols will use their 3D alternates if available.

General

This group of controls defines various options relating to the display of walls and fixture details when in the perspective view.

The bounding wall group of controls determines if the walls are drawn and if so if they are solid or transparent. The bounding walls are drawn around the floor area as specified on the floor area tab.

The fixture details control turns the channel, dimmer, gel, gobo values on or off when in perspective view.

Colours

This group of controls specifies what colours to use for the inside and outside of the bounding walls when displayed in the perspective view.

Library Editor

This chapter explains how to use the library editor which is used to edit the non visual libraries. The library editor is a separate application within the LxDesigner software suite.

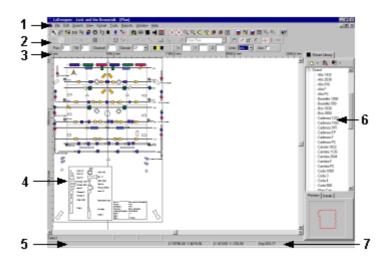
Topics covered in this chapter are:

Topic	Page
Overview	14.2
Adding New Records	14.6
Deleting Records	14.7
Importing Records	14.8
Exporting Records	14.9
Locating Text within Records	14.9
Filtering a Library	14.10
Library Specifications	14.11

Overview

The Library Editor is a separate application which allows the non-visual libraries such as gels and gobos to be edited. It is possible to add, edit import and export records within each of the libraries. Each library is displayed on a separate page of the library editor. There are two files associated with each library. One is the system file was is maintained and updated by LxDesigns. You can modify this file but any updates from LxDesigns will overwrite the changes you have made. The second file is the user file was is maintained and updated by you the user.

The Desktop



The following is a brief description of the version areas of the desktop.

1 - Menu Bar

Used to access the library editor commands.

2 - Toolbars

Toolbars provide a quick access to the major commands of the library editor.

3 – Library Records

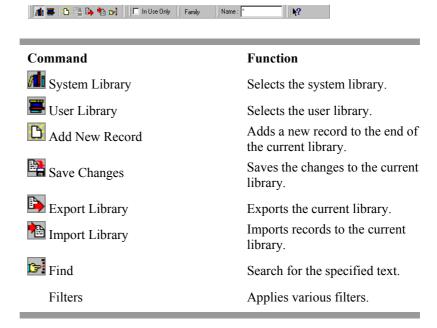
The contains of the current library are displayed in this spreadsheet type grid.

5 - Status Bar

This area brief message describing the current toolbar button.

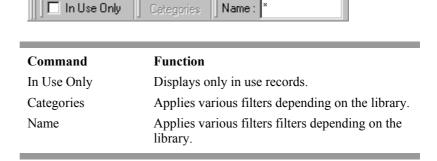
The General Toolbar

There is a single toolbar in the library editor which allows you to quickly and easy access the major commands and functions of the application.



The Filter Toolbar

This toolbar allows you to transfer items from the library to the stock file and to filter the current library.



The Help Toolbar

This toolbar allows you to enter the What's This help mode to get help on individual controls.



Command	Function
What's This	Enters What's This help.

The File Menu

This menu contains all of the file management and print related commands.

Command	Function
Rave Save	Saves the changes to the current library.
Export Data from Library	Exports the current library.
Import Data to Library	Imports records to the current library.
Exit	Exits the library editor.

The Edit Menu

This menu contains all of the editing related commands.

Command	Function
Add Record	Adds a new record to the end of the current library.
Find Text	Search for the specified text.

The Help Menu

This menu contains all of the help related commands.

Command	Function
Contents	Displays the contents page of the help file.
Index	Displays the index page of the help file.
What's This?	Enters What's This help.
Select Language	Allows the application lanaguage to be selected.
LxDesigns Home Page	Opens the home page of the LxDesigns website.
LxDesigns Members Page	Opens the members page of the LxDesigns website.
About	Displays the applications about window.

Adding New Records

New records are added to the end of the current library file. The current library file is indicated by the depressed library button.

To Add a New Record

- 1. Click the required **library name** on the spreadsheet heading tabs. i.e. Gel/Gobo/Cable
- 2. Either:

Click System Library to select the system library.

or

Click **User Library** to select the user library.

3. Either:

Click Add Record.

or

Press Ctrl+A.

- 4. Enter the data into the new record, which was added to the bottom of the list. Refer to section 3 onwards for a detailed description of the format of the records in each library.
- 5. Either:

Click Save Changes .

or

Type Ctrl+S.

Deleting Records

It is not possible to delete records from the libraries. The way to indicate that a record is not to be displayed is to mark it as not in use.

To Delete a Record

- 1. Click the required **library name** on the spreadsheet heading tabs. i.e. Gel/Gobo/Cable
- 2. Either:
 - Click System Library to select the system library.

or

- Click **User Library** to select the user library.
- 3. Remove the tick from the **In Use** column by clicking on it.
- 4. Either:
 - Click Save Changes.

or

Type Ctrl+S.

Importing Records

Records can be imported from other applications, such as Excel, in various formats. This is useful when a large number of records have to be entered as it may be easier to use another spreadsheet application which has more built in features. Records can either be appended to the end of the library or replace the current ones.

To Import Records

- Click the required **library name** on the spreadsheet heading tabs. i.e. Gel/Gobo/Cable
- 2. Either
 - Click System Library to select the system library.

or

- Click **User Library** to select the user library.
- 3. Click import Records.
- 4. Select the file type and enter the file name in the **Import File** dialog.
- 5. Click OK.
- 7. To append the new records to the end of the current library click **OK** on the next dialog.

Exporting Records

Records can be exported from any library in various file formats which can be read by other applications, such as Excel.

To Export Records

- Click the required **library name** on the spreadsheet heading tabs. i.e. Gel/Gobo/Cable
- 2. Either:
 - Click System Library to select the system library.

Οľ

Click **User Library** to select the user library.

- 3. Click Export Records
- 4. Select the file type and enter the file name in the **Export File** dialog.
- 5. Click OK.

Locating Text within Records

It is possible to locate text within records. This helps when it necessary to see if a particular record exists within the library.

To Locate Text

- 1. Click the required **library name** on the spreadsheet heading tabs. i.e. Gel/Gobo/Cable
- 2. Either:
 - Click System Library to select the system library.

or

Click **User Library** to select the user library.

- 3 Click Find Text
- 4. Enter the **text** to find.
- 5. Select the required **options**.
- 6. Click Find Next.
- 7. Repeat step 6 to find the next match.

Filtering a Library

It is possible to filter the current library to display only certain records which meet the search criteria. This helps when it is necessary to see only a sub set of a particular library.

To display In Use Records only

1. Click on the **In Use** check box. If a tick is displayed then only in use records are displayed.

Library Specifications

Each library has a particular format which is detailed in the following sections.

Gel Library

This library contains a list of all the gels that are currently available within LxDesigner. These are non-visual items that are normally added to fixtures. The fields available within the library are:

Field:	Name
Use:	Specifies the name of the gel.
Format:	Accepts up to 40 alphanumeric characters.
Notes:	None.

Field:	Code
Use:	Specifies the code of the gel, less any prefix such as # for Rosco.
Format:	Accepts up to 10 alphanumeric characters.
Notes:	None.

Field:	Supplier
Use:	Specifies the supplier.
Format:	Select from drop-down list of suppliers.
Notes:	The supplier must be entered into the supplier library and marked as being a 'gel supplier' to appear in the list.

Field:	Family
Use:	Specifies the gel family.
Format:	Select from drop-down list of families.
Notes:	The gel family must be entered into the categories library and marked as being a 'gel family' to appear in the list.

Field:	Colour (Red)
Use:	Specifies the Red content of the gels RGB value.
Format:	Accepts any value between 0 and 255.
Notes:	The Colour field will be update automatically to reflect this fields value.

Field:	Colour (Blue)
Use:	Specifies the Blue content of the gels RGB value.
Format:	Accepts any value between 0 and 255.
Notes:	The Colour field will be update automatically to reflect this fields value.

Field:	Colour (Green)
Use:	Specifies the Green content of the gels RGB value.
Format:	Accepts any value between 0 and 255.
Notes:	The Colour field will be update automatically to reflect this fields value.

Field:	Transmission
Use:	Specifies the gels transmission value.
Format:	Accepts any value between 0 and 100.
Notes:	This field is currently not used within LxDesigner.

Field:	Sheet Width
Use:	Specifies the sheet width.
Format:	Accepts any valid real value.
Notes:	This field is currently not used within LxDesigner.

Field:	Sheet Length
Use:	Specifies the sheet length.
Format:	Accepts any valid real value.
Notes:	This field is currently not used within LxDesigner.

Field:	Roll Width
Use:	Specifies the roll width.
Format:	Accepts any valid real value.
Notes:	This field is currently not used within LxDesigner.

Field:	Roll Length
Use:	Specifies the roll length.
Format:	Accepts any valid real value.
Notes:	This field is currently not used within LxDesigner.

Field:	Hire ID
Use:	Specifies the gels default hire ID.
Format:	Accepts up to 10 alphanumeric characters.
Notes:	None.

Field:	Stock
Use:	Specifies the default stock level.
Format:	Accepts up to 10 alphanumeric characters.
Notes:	None.

Field:	In Use
Use:	Specifies whether the gel is currently in use and available within LxDesigner.
Format:	Tick box. A tick indicates the gel is available.
Notes:	None.

Gobo Library

This library contains a list of all the gobos that are currently available within LxDesigner. These are non-visual items that are normally added to fixtures. The fields available within the library are:

Field:	Name
Use:	Specifies the name of the gobo.
Format:	Accepts up to 40 alphanumeric characters.
Notes:	None.

Field:	Code
Use:	Specifies the code of the gobo.
Format:	Accepts up to 10 alphanumeric characters.
Notes:	None.

Field:	Supplier
Use:	Specifies the supplier.
Format:	Select from drop-down list of suppliers.
Notes:	The supplier must be entered into the supplier library and marked as being a 'gobo supplier' to appear in the list.

Field:	Category
Use:	Specifies the gobo category.
Format:	Select from drop-down list of categories.
Notes:	The gobo category must be entered into the categories library and marked as being a 'gobo category' to appear in the list.

Field:	Image
Use:	Specifies the file name which contains the gobos image.
Format:	Accepts up to 80 alphanumeric characters.
Notes:	None.

Field:	Hire ID
Use:	Specifies the gobos default hire ID.
Format:	Accepts up to 10 alphanumeric characters.
Notes:	None.

Field:	Stock
Use:	Specifies the default stock level.
Format:	Accepts up to 10 alphanumeric characters.
Notes:	None.

Field:	In Use
Use:	Specifies whether the gobo is currently in use and available within LxDesigner.
Format:	Tick box. A tick indicates the gobo is available.
Notes:	None.

Cable Library

This library contains a list of all the cables that are currently available within LxDesigner. Cables cannot be added directly to the plan but are used by the cable builder to define cable runs and are only available in the Standard package. The fields available within the library are:

Field:	Name
Use:	Specifies the name of the cable.
Format:	Accepts up to 40 alphanumeric characters.
Notes:	None.

Field:	A End
Use:	Specifies the type of connector on the A End of the cable this is normally a plug.
Format:	Select from drop-down list of A End connectors.
Notes:	The A End connector must be entered into the category library and marked as being a 'Cable A End' to appear in the list.

Field:	B End
Use:	Specifies the type of connector on the B End of the cable this is normally a socket.
Format:	Select from drop-down list of B End connectors.
Notes:	The B End connector must be entered into the category library and marked as being a 'Cable B End' to appear in the list.

Field:	Length (in mm)
Use:	Specifies the length of the cable in millimetres.
Format:	Accepts any valid real value.
Notes:	None.

Field:	Circuits
Use:	Specifies the number of circuits in the cable.
Format:	Accepts any value between 0 and 255.
Notes:	None.

Field:	Weight per M
Use:	Specifies the weight of the cable per metre.
Format:	Accepts any valid real value.
Notes:	This field is currently not used within LxDesigner.

Field:	Max. Current
Use:	Specifies the maximum current per circuit.
Format:	Accepts any valid real value.
Notes:	This field is currently not used within LxDesigner.

Field:	Hire ID
Use:	Specifies the cables default hire ID.
Format:	Accepts up to 10 alphanumeric characters.
Notes:	None.

Field:	Stock
Use:	Specifies the default stock level.
Format:	Accepts up to 10 alphanumeric characters.
Notes:	None.

Field:	In Use
Use:	Specifies whether the cable is currently in use and available within LxDesigner.
Format:	Tick box. A tick indicates the cable is available.
Notes:	None.

Lamp Library

This library contains a list of all the lamps that are currently available within LxDesigner. These are non-visual items that are normally added to fixtures when they are defined. They allow the lamp type fitted within a fixture to be specified at design time. The fields available within the library are:

Field:	Name
Use:	Specifies the name of the lamp.
Format:	Accepts up to 40 alphanumeric characters.
Notes:	None.

Field:	Base
Use:	Specifies the lamp base type.
Format:	Accepts up to 10 alphanumeric characters.
Notes:	This field is currently not used within LxDesigner.

Field:	Power
Use:	Specifies the lamp's power rating.
Format:	Accepts any valid real value.
Notes:	None.

Field:	Lumens
Use:	Specifies the lamp's lumens.
Format:	Accepts any valid real value.
Notes:	This field is currently not used within LxDesigner.

Field:	Colour Temp
Use:	Specifies the lamp's colour temperature.
Format:	Accepts any valid real value.
Notes:	This field is currently not used within LxDesigner.

Field:	Life
Use:	Specifies the lamps life.
Format:	Accepts any valid real value.
Notes:	This field is currently not used within LxDesigner.

Field:	In Use
Use:	Specifies whether the lamp is currently in use and available within LxDesigner.
Format:	Tick box. A tick indicates the lamp is available.
Notes:	None.

Supplier Library

This library contains a list of suppliers that are used by the other non-visual and symbol libraries to specify the supplier of the item. The fields available within the library are:

Field:	Name
Use:	Specifies the name of the cable.
Format:	Accepts up to 40 alphanumeric characters.
Notes:	None.

Field:	Address 1
Use:	Specifies the type of connector on the A End of the cable this is normally a plug.
Format:	Select from drop-down list of A End connectors.
Notes:	The A End connector must be entered into the category library and marked as being a 'Cable A End' to appear in the list.

Field:	Address 2
Use:	Specifies the type of connector on the B End of the cable this is normally a socket.
Format:	Select from drop-down list of B End connectors.
Notes:	The B End connector must be entered into the category library and marked as being a 'Cable B End' to appear in the list.

Field:	Address 3
Use:	Specifies the length of the cable in millimetres.
Format:	Accepts any valid real value.
Notes:	None.

Field:	Post Code
Use:	Specifies the number of circuits in the cable.
Format:	Accepts any value between 0 and 255.
Notes:	None.

Field:	Country
Use:	Specifies the weight of the cable per metre.
Format:	Accepts any valid real value.
Notes:	This field is currently not used within LxDesigner.

Field:	Phone
Use:	Specifies the maximum current per circuit.
Format:	Accepts any valid real value.
Notes:	This field is currently not used within LxDesigner.

Field:	Fax
Use:	Specifies the cables default hire ID.
Format:	Accepts up to 10 alphanumeric characters.
Notes:	None.

Field:	Stock
Use:	Specifies the default stock level.
Format:	Accepts up to 10 alphanumeric characters.
Notes:	None.

Field:	In Use
Use:	Specifies whether the cable is currently in use and available within LxDesigner.
Format:	Tick box. A tick indicates the cable is available.
Notes:	None.

Accessory Library

This library contains a list of accessories, which are currently available within LxDesigner and are associated with the different symbol libraries. These can be either non-visual or visual items that are added to set, bars, truss or fixtures. The fields available within the library are:

Category Library

This library contains a list of categories that are used by the other non-visual libraries to specify certain fields such as gel family or cable connectors. The fields available within the library are:

Dimmer Racks Library

This library contains a list of all the dimmer racks that are currently available within LxDesigner. This information is used within the graphical patch editor when added racks to the patch. The fields available within the library are:

Control Equipment Library

This library contains a list of all the control equipment that are currently available within LxDesigner. This information is used within the graphical patch editor when added racks to the patch. The fields available within the library are:

Stock/Costs Editor

This chapter explains how to use the stock/costs editor which is used to edit venue stock level files and supplier costs files.

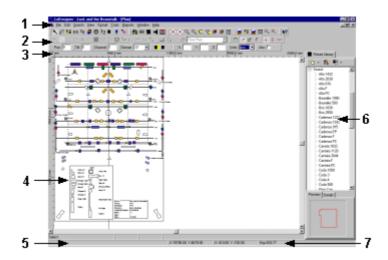
Topics covered in this chapter are:

Topic	Page
Overview	15.2

Overview

The Stock/Costs Editor is a separate application which allows stock and cost files to be edited. Stock files are used by LxDesigner to highlight shortages during the design process and to load the venue library palette which provides a short cut to the fixtures and equipment available at a particular venue. The costs files are used by the equipment usage report to generate the hiring or purchase costs of the design.

The Desktop



The following is a brief description of the version areas of the desktop.

1 - Menu Bar

Used to access the library editor commands.

2 - Toolbars

Toolbars provide a quick access to the major commands of the library editor.

3 - Stock/Cost file equipment list and data.

The contains of the current stock/costs file are displayed in this spreadsheet type grid.

4 - Librarys

The contains of the libraries either visual or non-visual are displayed here.

5 - Status Bar

This area brief message describing the current toolbar button.

The General Toolbar

This toolbar allows you to quickly and easy access the major commands and functions of the stock/costs editor.



Command	Function
New	Creates a new, blank stock/costs file.
Open	Opens an exisiting stock/costs file.
Save	Saves the changes to the current file.
Delete	Deletes the current stock item.
Find	Search for the specified stock item.

The Library Toolbar

This toolbar allows you to transfer items from the library to the stock file and to filter the current library.



Command	Function
<section-header> System Library</section-header>	Selects the system library.
Category	Applies various filters depending on the library.
Name	Applies various filters filters depending on the library.

The Help Toolbar

This toolbar allows you to enter the What's This help mode to get help on individual controls.



Command	Function
₩ What's This	Enters What's This help.

The File Menu

This menu contains all of the file management and print related commands.

Command	Function
New	Creates a new, blank stock/costs file.
Open	Opens an exisiting stock/costs file.
Save	Saves the changes to the current file.
Save As	Saves the current stock/costs file under new name.
Close	Closes the current stock/costs file.
Exit	Exits the stock/costs editor.

The Edit Menu

This menu contains all of the editing related commands.

Command	Function
Add to Stock	Adds the current item from the library to the stock file.
Note:	Deletes the current stock item.
Find Stock Item	Search for the specified stock item.

The Help Menu

This menu contains all of the help related commands.

Command	Function
Contents	Displays the contents page of the help file.
Index	Displays the index page of the help file.
What's This?	Enters What's This help.
Select Language	Allows the application lanaguage to be selected.
LxDesigns Home Page	Opens the home page of the LxDesigns website.
LxDesigns Members Page	Opens the members page of the LxDesigns website.
About	Displays the applications about window.

Graphical Patch Editor

This chapter explains how to use the graphical patch editor which is used to create patch information in graphical format.

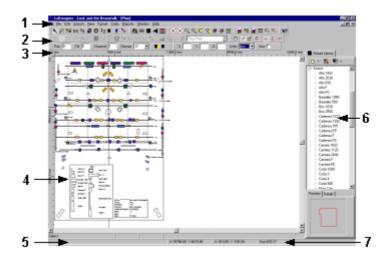
Topics covered in this chapter are:

Topic	Page
Overview	16.2

Overview

The Stock/Costs Editor is a separate application which allows stock and cost files to be edited. Stock files are used by LxDesigner to highlight shortages during the design process and to load the venue library palette which provides a short cut to the fixtures and equipment available at a particular venue. The costs files are used by the equipment usage report to generate the hiring or purchase costs of the design.

The Desktop



The following is a brief description of the version areas of the desktop.

1 - Menu Bar

Used to access the library editor commands.

2 - Toolbars

Toolbars provide a quick access to the major commands of the library editor.

4 - Status Bar

This area brief message describing the current toolbar button.

The General Toolbar

This toolbar allows you to quickly and easy access the major commands and functions of the stock/costs editor.

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Command	Function
New	Creates a new, blank patch design.
Open	Opens an exisiting patch design.
Save	Saves the changes to the patch design.
Add Desk	Add a control desk to the design.
Add Control Stream	Add a control stream to the design.
Add Distrubution	Add distrubution equipment to the design.
Add Dimmer	Add a dimmer to the design.
Add Control Channels	Add control channels to the design.
Move	Enters 'Move' mode.
Single Patch	Enters 'Single Patch' mode.
Bulk Patch	Enters 'Bulk Patch' mode.
Set Phase	Enters 'Set Phase' mode.
12 Set Channel Number	Enters 'Set Channel Number' mode.
Zoom Full	Views the full drawing.
Zoom In	Zooms in
Zoom Out	Zooms out.

The Parameters Toolbar

This toolbar allows you to transfer items from the library to the stock file and to filter the current library.



Command	Function
Phase	Sets the current phase.
Channel	Sets the current channel number.

The Help Toolbar

This toolbar allows you to enter the What's This help mode to get help on individual controls.



Command	Function
What's This	Enters What's This help.

The File Menu

This menu contains all of the file management and print related commands.

Command	Function
New	Creates a new, blank patch design.
Open	Opens an exisiting patch design.
Save	Saves the changes to the patch design.
Save As	Saves the current patch design under new name.
Close	Closes the current patch design.
Print	Prints the patch drawing.
Exit	Exits the stock/costs editor.

The Insert Menu

This menu contains all of the equipment insert related commands.

Command	Function
Add Desk	Add a control desk to the design.
Add Control Stream	Add a control stream to the design.
Add Distrubution	Add distrubution equipment to the design.
Add Dimmer	Add a dimmer to the design.
Add Control Channels	Add control channels to the design.

The Help Menu

This menu contains all of the help related commands.

Command	Function
Contents	Displays the contents page of the help file.
Index	Displays the index page of the help file.
What's This?	Enters What's This help.
Select Language	Allows the application lanaguage to be selected.
LxDesigns Home Page	Opens the home page of the LxDesigns website.
LxDesigns Members Page	Opens the members page of the LxDesigns website.
About	Displays the applications about window.

Appendix A - Supported Fixtures

ADB

The following ADB fixtures are supported within LxDesigner.

A56C	A57F	A59Z
C101	C103	C201
C51	C203	DS51
DN105	DS105	DS205
DS54	DSN105	DVW105
DW54	DVW205	DN205
F101	F201	F51
DW105		
SH10	SHF10	CH20
SH20	SHF20	CH50
SH50		

CCT

The following CCT fixtures are supported within LxDesigner.

Freedom 15/32	Freedom 20	Freedom 28/58
Freedom 40	Freedom 50	Freedom 7/17
Freedom PC	Freedom 30	Freedom F
SIL 10	SIL 15	SIL 30
Starlette FR (1K)	Starlette PC (1K)	Starlette FR (2K)
Starlette PC (2K)	Starlette FX	
Starlette Cyc 1	Starlette Cyc 4 Hor	Starlette Cyc 4 Vert
Turbo Z00TWW	Turbo Z00TX	Turbo Z00TY
Turbo Z00DWW		
Turbo Z00DX	Turbo Z00DY	Turbo Z00DS
Minuette 26	Minuette 17/36	Minuette 30/48
Minuette FR	Minuette PC	Minuette 6/10
Minuette Flood 3	Minuette Flood 4	Minuette 21/36
Minuette Flood 1		

Clay Paky

The following Clay Paky fixtures are supported within LxDesigner.

Combi Scan 3	Golden Scan 3	Golden Scan HPE
Mini Scan 150	Mini Scan 300	Mini Scan HPE
Piper ICC	Shadow Basic 1200	Shadow Basic 575
Shadow QS-LT 1200	Shadow QS-ST 1200	Stage Colour 1200
Stage Colour 300	Stage Light 300	Stage Scan
Stage Zoom 1200	Super Scan Zoom	Tiger CC 1200
Tiger CC 575	Tornado	

ETC

The following ETC fixtures are supported within LxDesigner.

Source 4 - 10	Source 4 - 19	Source 4 - 26
Source 4 - 5	Source 4 - 50	Source 4 - PAR
Source 4 - 36	Source4 Zoom 15-30	Source4 Zoom 25-50

High End

The following High End fixtures are supported within LxDesigner.

Studio Spot	Studio wash	
Technobeam	Technopro	Technoray
Cyberlight	Intellabeam	EC-1

Martin

The following Martin fixtures are supported within LxDesigner.

Imagescan

MAC250 MAC300 MAC500 MAC600

Roboscan 812 Roboscan Pro1220 Roboscan Pro218

Roboscan Pro918 Roboscan Pro518

Robert Juliat

The following robert juliat fixtures are supported within LxDesigner.

306 HF	306 HPC	310 HF
325 HF	329 HF	326 HPC
611 SX	613 SX	614 SX
713 SX	714 SX	310 HPC
710 SX		

Selecon

The following Selecon fixtures are supported within LxDesigner.

Acclaim Condensor	Acclaim F	Acclaim PC
Acclaim Flood	Acclaim Cyc	Acclaim Zoomspot
Compact F	Compact PC	
SF1200	PC1200	ZS1200 12/28
ZS1200 15/31	ZS1200 18/34	ZS1200 24/40
ZS1200 28/52	ZS1200 9/21	
Arena F	Arena PC	Arena Zspot 14/32
Arena Zspot 20/37	Arena Zspot 9/18	
Aurora Cyc	Aurora Cyc 4 Linear	Aurora Cyc 4 Square
Aurora Groundrow	Aurora Groundrow	
Single	4 way	

Spotlight

The following Spotlight fixtures are supported within LxDesigner.

Area 05 F	Area 12 F	Area 25 F
Combi 05 F	Combi 05 PC	Combi 12 F
Combi 12 PC	Combi 25 F	Combi 25 PC
Combi 50 F	Combi 50 PC	Figura 05 ZS
Figura 05 ZW	Figura 12 ZS	Figura 12 ZW
Figura 25 ZS	Figura 25 ZW	
miniFresnel LW	miniFresnel LW/CT	miniFresnel MC
miniFresnel MC/SBA	miniFresnel ME	miniFresnel ME/SBA
miniFresnel NO	miniPC LW	miniPC LW/CT
miniPC MC	miniPC MC/SBA	miniPC ME
miniPC ME/SBA	miniPC NO	miniProfile 20 LW
miniProfile 20 LW/CT	miniProfile 20 MC	miniProfile 20 MC/SBA
miniProfile 20 NO	miniProfile 40 LW	miniProfile 40 LW/CT
miniProfile 40 MC	miniProfile 40 MC/SBA	
miniProfile 40 ME	miniProfile 40 ME/SBA	miniProfile 40 NO
miniProfile 8 LW	miniProfile 8 LW/CT	miniProfile 8 MC
miniProfile 8 MC/SBA	miniProfile 8 ME	miniProfile 8 ME/SBA
miniProfile 8 NO		
miniProfile zoom LW	miniProfile zoom LW/CT	miniProfile zoom NO
miniProfile zoom MC	miniProfile zoom MC/SBA	
miniProfile zoom ME	miniProfile zoom ME/SBA	
Piccolo HS (Long- Throw)	Piccolo HS (Standard)	Piccolo HS (Wide- Beam)
Piccolo MS (Long-Throw)	Piccolo MS (Standard)	Piccolo MS (Wide-Beam)
Vario 05 PC	Vario 12 PC	Vario 25 PC
Vedette 12 M CR	Vedette 12 M HR	Vedette 12 M MT
Vedette 25 CM CR	Vedette 25 CM HR	Vedette 25 H
Vedette 25 M HR		

Strand

The following Strand fixtures are supported within LxDesigner.

Alto F	Alto PC	Alto 8/16
Alto 14/32	Alto 20/38	
Brio 18/30	Brio 25/50	
Beamlite 500	Beamlite 1000	
Cadenza 12/22	Cadenza 19/32	Cadenza 9/15
Cadenza F	Cadenza PC	Cadenza EP
Cantata 18/32	Cantata 11/26	Cantata 26/44
Cantata PC	Cantata F	
Coda 1000	Coda 3	Coda 4
Iris 1	Iris 4	Coda 500
Minim F	Minim PC	
Nocturne 1000	Nocturne 500	
Parcan CP60	Parcan CP61	Parcan CP62
Patt 123	Patt 137	Patt 23
Patt 743	Patt 750	Parcan EXG
Prelude 16/30	Prelude 28/40	Prelude F
Quartet F	Quartet PC	Quartet 15/25
Quartet 22/40		
T64	T84	Patt 60
Prelude F	Prelude PC	
SL 15/32	SL 23/50	SL 5
SL 10	SL 19	SL 26
SL 36	SL 50	
Mizar	Bambino 1K	Bambino 2K
Bambino 5K	Polaris	Castor

Teatro

The following Teatro fixtures are supported within LxDesigner.

Parcan (CP60)

Parcan (CP61)

Parcan (CP62)

Parcan (EXG)

Vari*lite

The following Vari*lite fixtures are supported within LxDesigner.

VL2C VL5B VL4

VL5Arc

VL7B

VL7A

VL6A VLM

VL6B VL5A

Glossary of Terms

attributes

A symbols properties such as gel, channel number or name.

bar

A standard piece of aluminum bar or pipe.

entity

An entity can be a primitive, symbol or group.

fixture

A generic lantern or intelligent moving light.

primitive

A primitive is the basic graphical building block of a drawing or symbol.

selection rectangle

A rectangle drawn around the currently selected entity or group of entities

symbol

A symbol consists of a number of primitives and additional data which describe its behavior.

truss

A section of performed triangular, box or ladder trussing.

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